S. Hrg. 99-64

AMENDING THE CLEAN WATER ACT

HEARINGS

BEFORE THE

SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

S. 53

A BILL TO AMEND THE CLEAN WATER ACT, AND
FOR OTHER PURPOSES

AND

S. 652

A BILL TO AMEND THE CLEAN WATER ACT, AND
FOR OTHER PURPOSES

MARCH 26, 27, AND 28, 1985

Printed for the use of the Committee on Environment and Public Works

U.S. GOVERNMENT PRINTING OFFICE
46-386 O WASHINGTON : 1985

S-321-21

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ROBERT T. STAFFORD, Vermont, *Chairman*

JOHN H. CHAFEE, Rhode Island
ALAN K. SIMPSON, Wyoming
JAMES ABDNOR, South Dakota
STEVE SYMMS, Idaho
GORDON J. HUMPHREY, New Hampshire
PETE V. DOMENICI, New Mexico
DAVE DURENBERGER, Minnesota

LLOYD BENTSEN, Texas
QUENTIN N. BURDICK, North Dakota
GARY HART, Colorado
DANIEL PATRICK MOYNIHAN, New York
GEORGE J. MITCHELL, Maine
MAX BAUCUS, Montana
FRANK R. LAUTENBERG, New Jersey

BAILEY GUARD, *Staff Director*
LEE O. FULLER, *Minority Staff Director*

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

JOHN H. CHAFEE, Rhode Island, *Chairman*

ALAN K. SIMPSON, Wyoming
STEVE SYMMS, Idaho
DAVE DURENBERGER, Minnesota
GORDON J. HUMPHREY, New Hampshire

GEORGE J. MITCHELL, Maine
GARY HART, Colorado
DANIEL PATRICK MOYNIHAN, New York
FRANK R. LAUTENBERG, New Jersey

CONTENTS

MARCH 26, 1985

OPENING STATEMENTS

Page
Bentsen, Hon. Lloyd, U.S. Senator from the State of Texas ... 5
Chafee, Hon. John H., U.S. Senator from the State of Rhode Island ... 1
Lautenberg, Hon. Frank R., U.S. Senator from the State of New Jersey ... 3
Mitchell, Hon. George J., U.S. Senator from the State of Maine ... 5

WITNESSES

Ravan, Jack E., Assistant Administrator for Water, Environmental Protection Agency, accompanied by William Whittington, Director, Office of Municipal Pollution Control; and Rebecca Hanmer, Director, Office of Water Enforcement and Permits ... 6
    Responses to additional questions from:
        Senator Stafford ... 40
        Senator Chafee ... 41
        Senator Humphrey ... 49
        Senator Symms ... 53
        Senator Bentsen ... 54
        Senator Mitchell ... 54
        Senator Baucus ... 59
Bills, reprints of:
    S. 53 ... 62
    S. 652 ... 120

MARCH 27, 1985 (p. 139)

OPENING STATEMENTS

Chafee, Hon. John H., U.S. Senator from the State of Rhode Island ... 139

WITNESSES

Boast, J. Thomas, limited partner, Bear, Stearns & Co., New York, NY ... 158
    Written statement ... 266
    "New Jersey Infrastructure Bank" report from ... 273
Cranston, Hon. Alan, U.S. Senator from the State of California ... 143
    Written statement ... 211
Elsperman, Robert, president, Tarlton Corp., St. Louis, MO, on behalf of the Associated General Contractors of America ... 175
Grillot, Francis, A.O. Smith Harvestore Products, Inc., chairman elect, Water & Wastewater Equipment Manufacturers Association ... 177
Kaiser, Charles, general counsel, Metropolitan St. Louis Sewer District, on behalf of the Association of Metropolitan Sewerage Agencies ... 148
    Written statement ... 233
Kasten, Hon. Bob, Senator from the State of Wisconsin ... 140
    Written statement ... 181
    Additional statements submitted for the record ... 198, 205
Ledbetter, J. Leonard, commissioner, Georgia Department of Natural Resources, on behalf of the Association of State and Interstate Water Pollution Control Administrators ... 144
    Written statement ... 220

Page
Lehne, Ted, councilman, Fairbanks, AK, on behalf of the National League of Cities 151
  Written statement 242
  Letter from 249
Prime, Kermit, Boyle Engineering Co., Orlando, FL, on behalf of the National Society of Professional Engineers 162
  Written statement 288, 305
Ransom, E.B., executive director, Ohio Water Development Authority, Columbus, OH 160
Simmons, Loretta, president, Blair Supply Co., Rochester, NY, on behalf of the National Utility Contractors Association 173
  Written statement 306
Smith, Jerry D., manager, Montecito Sanitary District, Santa Barbara, CA, on behalf of the California Association of Sanitation Agencies 153
  Written statement 252

MARCH 28, 1985 (p. 319)

OPENING STATEMENTS

Chafee, Hon. John H., U.S. Senator from the State of Rhode Island 319
Simpson, Hon. Alan K., U.S. Senator from the State of Wyoming 335

WITNESSES

Austerman, Richard O., special counsel, Regulatory Affairs, Amax, Inc., Denver, CO, on behalf of the Western Regional Council 339
  Written statement 488
Babcock, Hope, deputy counsel, National Audubon Society, Washington, DC 356
  Written statement 510
Douglas, Hon. Tim, mayor, Bellingham, WA 353
  Written statement 503
Dubrowski, Frances, senior attorney, Natural Resources Defense Council 322
  Written statement 377
Gillett, Dr. James W., professor of ecotoxicology, Cornell University, Ithaca, NY 326
  Written statement 432
Gorton, Hon. Slade, U.S. Senator from the State of Washington 352
Hair, Jay, executive vice president, National Wildlife Federation, Washington, DC 333
  Written statement 448
Malloch, Charles, Monsanto Co., St. Louis, MO, on behalf of the Chemical Manufacturers Association 324
  Written statement 398
Mattingly, Hon. Mack, U.S. Senator from the State of Georgia 321
  Written statement 365
McCloskey, J. Mike, executive director, the Sierra Club, San Francisco, CA 337
  Written statement 475
  Letter from 484
Reeves, Merilyn, natural resources director, League of Women Voters, Washington, DC 358
  Written statement 524
Sampson, R. Neil, executive vice president, Forestry Association, Washington, DC 360
  Written statement 534
Zimmerman, Jeffrey, environmental counsel, Occidential Petroleum Co., Washington, DC, on behalf of the National Environmental Development Association 330
  Written statement 425

ADDITIONAL STATEMENTS SUBMITTED FOR THE RECORD

Tennessee Valley Authority 538
Orange County, CA, sanitation districts 551
Avalon, CA 563
San Antonio, TX, department of waste water management 567
American Paper Institute 573
Brooklyn Union Gas Co 603

Page
Interstate Conference on Water Problems 610
Mining and Reclamation Council of America 616
National Agricultural Chemicals Association 623
National Association of Regional Councils 625, 631
Synthetic Organic Chemical Manufacturers Association 647
United States Brewers Association, Inc 654
Washington Environmental Coordinating Committee 664

AMENDING THE CLEAN WATER ACT

TUESDAY, MARCH 26, 1985

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, DC.

The subcommittee met at 10:03 a.m., in room SD-406, Dirksen Senate Office Building, Hon. John H. Chafee (chairman of the subcommittee) presiding.

Present: Senators Chafee, Symms, Bentsen, Mitchell, and Lautenberg.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator **CHAFEE**. We want to welcome everyone here this morning as we start our hearings on amending the Clean Water Act, and we welcome you, Mr. Ravan.

This is the first of 3 days of hearings. Today, we will hear from the administration, and then in the next 2 days, we will hear from various groups and individuals.

As you know, our legislation on this subject was not enacted last year. As a result, the Construction Grants Program and the regulatory provisions of the law are up for reauthorization this year. They all expire on September 30.

We have two bills, before us, S. 53, which was introduced by the distinguished chairman of this full committee, Senator Stafford, and S. 652, which was introduced by me with Senators Stafford, Mitchell, Bentsen, and Durenberger.

Let's take the first one, S. 53. That is almost identical to the legislation which was reported out of this committee last year. It strengthens the current law by requiring greater control of toxic pollutants. It increases civil and criminal penalties, establishing a nonpoint pollution program and setting new requirements for sludge management and disposal.

The committee grappled with reauthorizing those and other provisions in S. 53 since 1982, so I don't expect this subcommittee will have much problem with those and won't spend a good deal of time on them. However, there have been concerns expressed over the provisions affecting the permit terms, antibacksliding compliance deadlines and nonpoint pollution. So, we will look at those areas carefully and see if any changes are warranted.

With respect to the Construction Grants Program, many members of this subcommittee and the full committee and members of the audience also remember the reforms we made in 1981, and those reforms began to gradually transfer Federal involvement to the State and local governments. Changes were made to more clearly focus the program on water quality; that is what we are trying to do, and we eliminated Federal funding for collectors and for most combined sewer overflow projects. The Federal share was reduced from 75 percent to 55 percent. The authorization level was reduced from $5 billion to $2.4 billion a year.

In 1981, we began to turn over to State and local governments more of the action. This legislation we have before us today will continue that policy.

S. 652 reauthorizes a total of $18 billion over 9 years for the construction of the publicly owned treatment works. Between now and the end of fiscal year 1986, 1987, 1988, $2.4 billion is authorized annually for the Construction Grants Program, which the Federal Government will give out to the States.

For the next 3 years after that, 1989, 1990, and 1991, we continue to authorize the funds at $2.4 billion, but we phase in the State Water Pollution Revolving Loan Fund Program, and this is achieved by creating a new title, title VI, in the Clean Water Act. Then in the remaining 3 years after that, 1992, 1993, and 1994, we wind down the program reducing authorizations at the rate of $600 million annually.

This proposal lives up to the commitment that I made at the time when we passed the 1981 amendments that we keep the funding at $2.4 billion for 10 years, that is, through 1991. We have also added and additional $3.6 billion over 3 years for added financial stability.

I know those testifying over the next few days may well say, "We need more money; it is not enough." I too would like to have more money. But, to those who are here and who are going to testify, and those who write and come to see me, we have got to remember there are other players in this drama. One of the key players resides at 1600 Pennsylvania Avenue. He only wants $6 billion in this program over 4 years compared to our $18 billion over 9 years. He has told us that his veto is drawn, and he has challenged us to "make his day."

I think we have a proposal that he can accept. I hope so.

Anyway, we are going to proceed with it.

S. 652 is responsible legislation which provides for a smooth transition to greater State and local responsibility. It assures that the construction of necessary facilities will move ahead so that we can continue to make impressive grants in water quality.

Now, a word on the Section 404 Program. As many of you know, I am quite disturbed over how this program is being run. The Department of the Army, through the Corps of Engineers, have made changes in the program which, in my judgment, fail to adequately protect our wetland areas. I am equally concerned that EPA is not exerting the veto it has under 404(c), the veto over environmentally unsound projects.

Now, in this particular reauthorization, we are not going to deal with section 404. I plan to hold oversight hearings on May 1 and 2 on section 404, and after that, we will determine whether or not legislative changes are necessary to strengthen the program.

Today, we have the EPA testifying on the administration's proposed legislation, which I believe you are sending and you have with you today; is that right, Mr. Ravan?

Mr. RAVAN. Yes, sir.

Senator CHAFEE. Obviously, we haven't had much time to review it, although we are familiar with the outlines of it. So, we look forward to hearing your testimony on this subject and welcome your reaction and the reaction of your Agency to the legislation we have proposed.

Mr. Ravan, you will be our principal witness today in your capacity as Assistant Administrator for Water. We also appreciate that this may well be your last appearance before us in that you have accepted a new position as EPA Regional Administrator in Atlanta, where I think you are from originally, aren't you?

Mr. RAVAN. Yes, sir.

Senator CHAFFEE. Over the last 18 months, you have served EPA and our Nation well in carrying out your responsibilities and I, for one, want to express my appreciation to you. We will miss you, and we wish you well in your new duties as Regional Administrator in region IV.

Now, a word as to how we will proceed. After we have completed the hearings, we will be developing a markup vehicle which will contain provisions both from S. 53 and S. 652. We have scheduled a markup for next week to consider the legislation based on the hearings that we will have this week. It is my intent to try to complete the markup on that day, the 4th of April.

I would urge members that have amendments to let us know about them. Please let us know in advance, if it is possible. If there are any amendments that any of the members have, it is very helpful to us to let us know about them so that we can prepare for them for the markup.

What happens next? I have talked with the chairman of the full committee, Senator Stafford, he has given the Clean Water Act top priority. I will be talking with him as to when we can get a bill reported out and up before the full committee which we hope to have done before the end of April, and be ready to go to the Floor on the first part of May. We want to move quickly on this subject, because, as I mentioned before, this program must be reauthorized by September 30.

Senator Lautenberg, we are delighted you are here. If you have an opening statement, this would be the appropriate time.

OPENING STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator LAUTENBERG. I thank you, Mr. Chairman. I am pleased to be here and to have Mr. Ravan here. I didn't realize this is a swan song appearance. He is leaving a legacy of good decisions.

In the early seventies, Mr. Chairman, the people of the country made a fundamental decision that they wanted a concerted effort to clean up the Nation's waters, waters for fishing, swimming, recreation, and drinking, and the Congress responded by passing the Federal Water Pollution Control Act Amendments of 1972.

The act established the goal to restore and maintain the integrity of the Nation's waters which captures the essence of the people's desire for clean water.

During the 13 years the act has been implemented, there have been impressive strides made in cleaning up our Nation's waters, but much remains to be done. Our work on this committee, to reauthorize the act, must include amendments to solve those problems which are preventing us from achieving the goals of the act.

Of greater importance is future funding for the Construction Grants Program.

Properly running sewage treatment facilities is an essential ingredient in cleaning up the Nation's waters. Yet, it is clear that the existing construction grants funding is quite inadequate to meet the remaining national needs.

New Jersey alone has over $3 billion in eligible funding needs. The committee needs, Mr. Chairman, to explore some innovative mechanisms to provide funding for the construction of these facilities.

At the same time, we have to ensure that any new financing does not result in a disproportionate, adverse effect on older urban areas. EPA's recent task force report stated, "The heaviest financial burden for waste water treatment would fall on small communities and the older urban areas." The report also concluded, that, "Many communities are unable to meet waste treatment costs through user fees alone." Any new funding mechanism must address the ability of urban areas to raise funds for sewage facilities and the ability of its citizens to pay increased user fees.

The committee also has to address the following issues: Length of permits. Last year, the committee decided to extend the length of permits from 5 to 10 years, and we need to be sure that the extension of permits for facilities discharging toxic pollutants will not have an adverse effect on water quality. I hope the subcommittee will revise its decision to extend permits from 5 to 10 years.

The matter of nonpoint source pollution: As industrial dischargers have been cleaning up their wastes, non-point-source pollution is becoming an increasingly important source of pollutants entering the Nation's waters. We need to establish an effective non-point-source pollution program and to provide adequate funding to implement the program.

Sewage sludge from some municipalities in our region is now being dumped into the ocean. Other municipalities are considering using the ocean to dispose of their sludge. EPA needs to assist these and other communities in developing and implementing cost-effective, environmentally beneficial uses of sludge. EPA has failed to provide the assistance required in section 405 of the act, and we need to explore EPA's efforts in meeting the requirements of the act.

Estuaries are among the most productive natural systems. Many estuaries, however, have been severely degraded. We need to determine whether EPA has adequate legislative authority to protect these valuable areas.

Finally, Mr. Chairman, I am pleased that you have scheduled oversight hearings on section 404 dredge and fill programs.

The Corps of Engineers' issuance of a permit for the construction of Westway has heightened my concern in the direction that this program has taken over the last 4 years. I look forward to working with you, Mr. Chairman, and members of the subcommittee, on these critical issues.

Senator CHAFEE. Thank you very much, Senator Lautenberg. We look forward to working with you, and especially, I am pleased that you stated again your interest, which you have demonstrated before, in section 404.

[Senator Bentsen's and Senator Mitchell's opening statements follow:]

OPENING STATEMENT OF HON. LLOYD BENTSEN, U.S. SENATOR FROM THE STATE OF TEXAS

Mr. Chairman, this Nation has made remarkable progress toward correcting the disgraceful conditions of our waters in the 10 years since Congress first authorized the EPA construction grants program in 1972.

It has been and continues to be a costly undertaking, but it has the strong support of the American people, and we are now beginning to see the light at the end of the tunnel.

This does not mean that we have concluded this important national program, nor does it mean that it is time for the Federal Government to retreat from its responsibilities. The planned phase-out of Federal involvement should be carefully crafted to assure a smooth transition to State and local governments.

The OMB proposal to phase out federal involvement by 1990 and to fund no new starts is much too abrupt and poorly planned to permit a successful continuation of the program. I believe it is unacceptable to Congress, to the States, and to the American people.

In fairness, and in an effort to achieve maximum results, the phase-out should occur over a longer period of time in order to provide an effective transition for States with lengthy legislative cycles or difficult remaining needs.

States should be given the opportunity to prepare for the future through a revolving fund, and I look forward to hearing the views of my colleagues and other interested person on this proposal.

I am aware of the importance of developing a fair allocation formula for Construction Grant funds, and we will consider the need to minimize disruptions in States that would receive less than others, because their programs are closer to completion or they do not match up to eligibility requirements.

We must keep in mind that the goal is clean water. We have made progress, but we must continue our work in this hearing and in the days ahead if we are to achieve this important national goal.

OPENING STATEMENT OF HON. GEORGE J. MITCHELL, U.S. SENATOR FROM THE STATE OF MAINE

Mr. Chairman, over 10 years ago, this Committee responded to an outpouring of public concern for environmental protection by adoption of the Clean Water Act. Over the past decade, we have improved our understanding of environmental issues and expanded our commitment to environmental programs. While there have been dramatic and necessary changes in environmental protection, it is important to recognize that the basic design of the Clean Water Act is still sound and the public commitment to a safe environment remains constant.

The strength of the national consensus for environmental protection and the Clean Water Act is illustrated in public opinion polls. A recent Harris survey found that the great majority of those responding supported the Clean Water Act or wanted it strengthened, even considering the costs of pollution controls.

The basic design of the Clean Water Act, which provides for a combination of technology and water quality-based controls, has proven to be a balanced and workable approach to pollution control. The construction grant and discharge permit programs established in the Act have accomplished substantial improvements in water quality. In addition, the concept of a Federal/State partnership for water pollution control is now well established and working effectively. The Clean Water Act amendments of 1977 and 1981 brought important improvements to the Act, but did not alter its basic structure.

In the State of Maine, there is clear evidence of the effectiveness of the pollution control programs established in the Clean Water Act:

Atlantic salmon have returned to the Penobscot River after a 30-year absence;

The Maine commercial shell fishing industry, declined for many years due to the discharge of untreated sewage. As of 1982, over 4,000 acres of soft shell clam flats had been reclaimed with and estimated value of $6½ million a year.

I cite these examples as the success story of just one State. Virtually every State in this country has similar examples.

The majority of the issues we will address in this hearing involve proposals to fine tune the existing elements of the Clean Water Act. Many of these amendments, which were debated at length in hearings held last session, offer valuable improvements to the Act.

There are also a number of proposed amendments which would significantly expand or revise the Act to address emerging pollution problems or changing conditions. Three of these amendments address issues of particular importance: control of toxic pollutants; management of nonpoint pollution; and financing of waste water treatment plant construction.

I look forward to hearing the views of witnesses on these issues and other topics.

Senator **Chafee**. All right, Mr. Ravan, why don't you proceed with your statement?

STATEMENT OF JACK E. RAVAN, ASSISTANT ADMINISTRATOR FOR WATER, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY WILLIAM WHITTINGTON, DIRECTOR, OFFICE OF MUNICIPAL POLLUTION CONTROL; AND REBECCA HANMER, DIRECTOR, OFFICE OF WATER ENFORCEMENT AND PERMITS

Mr. **Ravan**. Thank you, Mr. Chairman, Senator Lautenberg. It is a pleasure for me to be here this morning. I have certain key persons on my staff to help us delve into these issues after my statement, and as it may seem appropriate, with your permission, Mr. Chairman, I will ask them to come forward and join me on particular questions or areas.

Senator **Chafee**. That is perfectly appropriate. It is good for us to get to know the members of your staff. Why don't you bring them up and then we can proceed.

Mr. **Ravan**. I will ask Bill Whittington to join me.

Senator **Chafee**. Why don't you identify those with you now?

Mr. **Ravan**. Bill Whittington, Pat Tobin, and Peter Perez.

Senator **Chafee**. Anybody else you want at the table?

Mr. **Ravan**. I only want Mr. Whittington.

Senator **Chafee**. All right. Glad you are here. Go to it, Mr. Ravan.

Mr. **Ravan**. Mr. Chairman, my statement is relatively short and it contains, I think, some new information.

As was pointed out this morning, we have learned a great deal about the problems of preserving and enhancing the quality of our Nation's water resources since the passage of the Federal Water Pollution Control Act Amendments of 1972. The basic strategy of that statute, namely, the use of technology standards together with water quality standards, has proven to be an effective approach to water pollution control. Remarkable progress has been made in the last decade or so. More, of course, remains to be done. As history has shown us, periodic adjustments to the act are necessary to ensure that we maintain our progress toward the achievement of the act's goals in the most efficient and effective manner possible.

To that end, members of this subcommittee, members of the regulated community, and we at EPA share a common desire to set the course of water pollution control for the future and to establish the necessary procedures and mechanisms to follow it.

Based on our first-hand experiences, as well as our vision of the problems that confront the program, we believe it is time to review this program and focus on adjustments in several areas. I would emphasize, Mr. Chairman, that we at EPA believe the changes now necessary are not major alterations in the structure or strategy of the act which would delay the program and result in serious resource demands. Rather, the focus of the administration's proposals, with several exceptions I will discuss, is on technical refinement of the act.

Perhaps the toughest issue before this subcommittee, Mr. Chairman, concerns the direction and future of the construction grants program. Let me address that first.

The administration's proposal calls for a $6 billion phaseout, reflecting concern with controlling the Federal budget deficit, a concern which all of us in Government share. This deficit has produced a different fiscal climate. It forces us to make hard choices, and alter some of our timetables. At the same time, I believe that the proposal provides a return to the ultimate State and local self-sufficiency in the construction of municipal wastewater treatment facilities.

Briefly, the proposed changes to title II would phase out the Construction Grant Program over a 4-year period beginning with an authorization of $2.4 billion in fiscal year 1986; $1.8 billion in 1987; $1.2 billion in 1988, $0.6 billion in fiscal year 1989, and thereafter ending the program. All funding would be restricted to the completion of currently ongoing phased or segmented projects. The reasoning behind this use of remaining Federal funds is to concentrate resources on completing what we have already started, and have committed to fund as a result of the 1981 amendments. To be eligible, such projects must have been initiated prior to the fiscal year 1986 budget submittal and must require additional funding to complete remaining segments. To further ensure that Federal funds are directed only to the eligible costs under these amendments for such phased or segmented projects, the 20 percent Governor's discretionary fund, which allows funds to be used for noneligible purposes, needs to be eliminated from title II. Similarly, the allotment formula used to allocate funds to States would be based on remaining phased or segmented project needs. Finally, other set-asides should be discontinued. The plan is to put as much of the funds as possible to finishing ongoing projects. Thus, no Federal funds should be set aside for new starts in rural areas or new innovative or alternative projects. Similarly, no Federal funds would be used for water planning activities. State management assistance under 205(g) would continue but should be limited to managing the Construction Grants Program phaseout. Section 205(g) funds would not be available for other purposes.

I want to talk now about where we have been and where we must go in terms of funding the necessary construction of municipal wastewater treatment plants. Prior to 1972, States and local governments paid for most wastewater treatment plant construction to the tune of $51 billion compared to a $5 billion Federal appropriation.

Senator CHAFEE. What period does the $51 billion cover?

Mr. RAVAN. We looked back 20 years, Senator Chafee.

Senator CHAFEE. You mean from 1952 to 1972?

Mr. RAVAN. Yes, sir.

Of course, the 1972 Federal Water Pollution Control Act Amendments increased the Federal role dramatically, particularly in funding. Approximately $44 billion has now been appropriated, and, as the Federal role in the Construction Grant Program increased, the previously high State and local contribution dropped, and in my opinion, dropped dramatically.

In essence, Federal funding has simply substituted for, not supplemented, State and local financing.

In 1977, Congress passed major amendments clarifying the intent that States have the major responsibility to manage and implement title II. The theory behind the 1977 amendments was that State governments, which are close to the problems, should have the administrative capability to carry out their responsibilities. Gradually, the Construction Grants Program grew into a program now recognized nationwide as an effectively managed delegated program, a true Federal-State partnership. We have much to be proud of in making this successful transition.

In 1980, even more far-reaching reforms in the program began to be discussed, which eventually led to the 1981 amendments to the Clean Water Act, as the chairman pointed out. These major amendments signaled the EPA's Construction Grants Program was moving gradually from the prevailing high level of Federal financial involvement to a program focused on increased State and local self-sufficiency. The long-range implications of these amendments were significant. Funding eligibilities were limited so as to reduce the growing level of Federal financial commitment. To focus the grants program on existing rather than future needs, the Congress generally limited Federal funding to completing the construction of Federal facilities needed to intercept and treat wastewater discharges as prescribed by national technology standards and State water quality standards.

Today, we begin the final phase of this transition to State and local self-sufficiency. For our States and cities, this presents a tremendous challenge. For the past 13 years, they have relied heavily upon Federal tax levies. You will ask me: Are States and localities ready to become self-sufficient again, and what will be the Federal Government's future role?

I am confident we can make this final funding transition. I do not underestimate the budgetary realities that States and municipalities will face in reassuming increased fiscal responsibilities as this transition proceeds. But, over the last few years, States and localities have moved a long way toward developing both the institutional and financial capability to address their future needs on their own. Already, many States have acted aggressively in increasing the amount, diversity, and sophistication of their financial assistance programs for these localities. In short, at this critical juncture in our program, State governments are discovering that their responsibilities have not only been increased but also have become more varied. In the future, State governments will continue to play the pivotal role in the Construction Grants Program.

For their part, localities are beginning to develop diverse financing options as well. A few have turned to the private sector, which has recently shown an interest in long-term participation in the municipal wastewater treatment field. Other localities are examining different conventional and nonconventional financial routes. As required by the current act, user fees are under examination, as are other options for funding of future growth, rehabilitation and reconstruction, and more efficient operation and maintenance.

In the coming years, EPA will support these initiatives to smooth the path toward self-sufficiency. We will advise and assist technically, environmentally, scientifically, and in any way we can, the vast majority of responsible communities who are working to achieve compliance and self-sufficiency Working with the States, we will use the enforcement tools we have been given to cause noncompliers to meet their permit requirements. Our municipal policy spells out just exactly how we will accomplish this objective.

There will always be some who will say that the Federal funding role ends too soon. But believe that State and local governments have begun this path to assume full responsibility for the wastewater treatment program.

Let my turn my attention, Mr. Chairman, to civil enforcement for a moment.

Prior to preparing the administration bill, we made a careful review of existing civil enforcement authorities under the Clean Water Act as compared with other environmental statutes. I want to highlight two changes that we are proposing to the Clean Water Act. These changes concern administrative penalties and the maximum daily penalty assessment.

At present, we basically have two civil enforcement tools. The Agency may issue an administrative order requiring compliance by a violator, or the Agency may ask the Justice Department to file a civil action in the U.S. District Court for penalties and injunctive relief.

The administration's bill would add a third option: Authority for EPA to assess administrative civil penalties up to $10,000 per day per violation with a maximum penalty of $125,000. The option of administrative penalties is already available under many other environmental statutes.

Our intention is not to retreat from vigorous judicial enforcement. We need administrative panalty authority as a complement to our enforcement tools so that we can most efficiently and effectively assure compliance with the Clean Water Act. Many violations simply do not warrant the expenditure of judicial resources. But issuance of an administrative order, without penalties, has not proven powerful enough to motivate violators or deter other similar violators. Our experience with other administrative penalty authorities, such as Toxic Substance Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act proves that, used prudently in the right cases, this tool can be a strong force for achievement of quick compliance.

Administrative penalty authority particularly makes sense under the Clean Water Act. Often these penalty actions will result from self-monitoring. The factual issue will be straightforward enough that administrative alternatives to court litigation would allow an opportunity for a efficient method of resolving the matter. Our proposal includes the opportunity of more flexible hearing procedures that could be tailored to processing a large number of straightforward cases, while still ensuring procedural protection for the alleged violator.

There are differences between our administrative penalty provision and that contained in S. 53. For example, our provision allows a total administrative assessment of up to $125,000 versus the $75,000 ceiling. We favor the higher amount because it will signal to the regulated community the importance which the Agency attaches to compliance and enforcement. The higher amount is often necessary to recapture the economic benefits of noncompliance by a violator. In addition, our proposal and S. 53 differ with respect to court review. We favor court review based on the administrative record developed in the Agency's administrative proceeding, not a new trial in district court. Review would be based on whether there was substantial evidence in the record of the administrative proceeding to find a violation and whether the assessment of the penalty was an abuse of discretion.

Like S. 53, our bill, would raise the daily maximum civil penalty per day per violation for court actions from $10,000 to $25,000. This is consistent with the daily maximum civil penalty assessment under the Clean Air Act, TSCA, and RCRA. Enforcement consistency among the various environmental statutes should increase the regulated community's awarness of the importance of compliance.

The criminal penalties contained in 309(c) of the act have been increased. Existing misdemeanor penalties have been retained for negligent violations. However, the penalties for knowing violations of substantive provisions of the act or of permit conditions and limitations and sewage sludge disposal and pretreatment requirements, have been increased to felony level. Maximum fines for knowing first offenses have been increased to $50,000, together with maximum terms of imprisonment of up to 3 years. Also, the maximum term of imprisonment for the knowing making of false statements, representations, and certifications, or tampering with monitoring equipment required under the act, has been increased from 6 months to 2 years. The provision doubling the maximum fine and term of imprisonment for second convictions under the same paragraph of the act has been extended to this latter penalty.

Also, a new provision adopting from RCRA the concept of knowing endangerment has been added to section 309(c), providing for enhanced felony penalties for certain conduct which knowingly threatens "imminent danger of death or serious bodily injury." The substantial penalties for such conduct are equivalent to those contained in the existing RCRA knowing endangerment provision.

The proposed bill's new system of higher criminal penalties is roughly comparable with that now contained for comparable kinds of conduct in RCRA, as that statute was recently amended. We believe that these penalties, applied to the more serious instances of wrongdoing which cause or threaten to cause significant environmental harm or which have a significant impact upon EPA's ability to run an effective regulatory program, will have a substantial deterrent effect upon such conduct.

NPDES permits are the primary control mechanisms for achieving the majority of our Clean Water Act goals. Therefore, in developing the administration recommendations, we have attempted to identify those provisions most in need of amendment to enhance our ability to continue to effectively implement this successful program. Our bill contains approximately a dozen amendments which will help the NPDES Program to face its new challenges.

The most important amendment in this group addresses the need for an extension of the BAT/BCT industrial compliance deadline. There is no question some kind of extension is necessary. The statute currently requires compliance by July 1984. We are mindful of the fact that the Agency has not been able to promulgate all needed BAT/BCT effluent limitations guidelines. Moreover, EPA and the States have not been able to issue all the permits setting forth individual requirements. Because of the current statutory language, we must issue permits which require immediate compliance, even where that is impossible through no fault of the permittee.

To alleviate this problem, we are recommending an extension that will realistically recognize the time necessary to issue guidelines and permits as well as providing dischargers with a reasonable period to achieve compliance. For limitations based on guidelines issued prior to July 1985, the outside deadline would be July 1, 1988. For limitations based on guidelines issued after that date, or for "best professional judgment" permits, compliance would be required no later than 3 years from promulgation or permit issuance, respectively. Of course, where compliance can be achieved prior to the outside date, that would be required.

Another amendment we are proposing which affects permitting concerns section 301(g) modifications for nonconventional pollutants. This amendment would ensure that variances are granted only in those instances where the Agency has adequate scientific information on aquatic and human health impacts. This is important, since many pollutants defined as nonconventional under the Act are, in fact, highly toxic. EPA's experience indicates that inadequate test methods and incomplete scientific information make it impossible to make the required findings under section 301(g) for many pollutants. This has led to inordinate delays, unproductive resource drains on Agency staff, and uncertain protection against toxicity. The administration proposal specifies those pollutants for which we have adequate data to determine whether the statutory factors are satisfied. The amendment also gives the Administrator the ability to add pollutants to the list where a petitioner demonstrates the availability of satisfactory test methods and data to make the necessary findings. This is appropriate in light of emerging scientific information in this area.

The balance of our proposed amendments regarding permitting are largely administrative and technical improvements and do not fundamentally change the structure of the NPDES Program. For instance, in order to improve program efficiency, we are requesting authority to issue permits with 10-year terms where that is appropriate. In another provision, we are seeking clarification of our authority to issue general permits. For several years, the general permit approach has been an effective device to deal with certain large categories of dischargers with identical control requirements.

We believe the adoption of these proposals will improve the NPDES Program and help us obtain the success in the future that has been achieved in the past.

In conclusion, Mr. Chairman, and other members of the committee, I don't believe there are any easy answers to the questions now before the subcommittee on the future of the Clean Water Act. I have attempted to address only a few of the proposals in the administration's program. My staff and I stand ready to assist the committee and, in the future, to work out meaningful dialog so that the proposal that is before the subcommittee can be finalized.

Thank you, Mr. Chairman. That concludes my prepared testimony.

Senator CHAFEE. Thank you, Mr. Ravan. I think we will go right to questions. Why don't we limit them to 8 minutes apiece, and go in order of appearance here, and then start through again. We will have plenty of time for everybody to ask questions.

Senator Mitchell, do you have an opening statement you would like to submit now or give?

Senator MITCHELL. I do have an opening statement, Mr. Chairman. In the interest of time, I will merely ask that it be submitted in the record at the appropriate place and proceed with questioning.

Senator CHAFEE. Fine. That certainly will be done.

Mr. Ravan, your approach to compliance is quite different from the one we have in our bill.

In other words, as you say in your statement, "Compliance would be required no later than 3 years from promulgation of permit issuance."

In the bill that we have we keep the same outside date of July 1, 1987. Maybe we ought to go another year to July 1, 1988. We can determine that. But nonetheless, we set a deadline where you have to comply. Your answer is: How can they comply before the guidelines have been issued? Our answer is: You better get the guidelines out. Industry can just delay and delay and, indeed, go to court and hold you up so that this stalling games goes on forever.

What is your answer to that?

Mr. RAVAN. Mr. Chairman, I would agree with you that past performance by the Environmental Protection Agency has not been, in particular, stellar. However, since the settlement of the principal cases involved with compliance, that is to say, the suit that outlined the need for some 34 principal guidelines for the major categories of industry, and beyond that some 126 toxic pollutants, the Agency's performance over the past 18 months to 2 years, I believe, has hopefully, increased the level of confidence of the subcommittee and full committee and, indeed, the American people.

We have, so far, published 24 of the necessary 29 industrial categorical guidelines, and we feel that we will complete this job within the next few months.

Senator CHAFEE. Next few months?

Mr. RAVAN. We hope to complete the process by March 1986 for the most complicated of the guidelines. Finally, my point is that the permittees, have in hand either a BPJ permit or the guidelines, but some time is necessary for achieving compliance. We consider 3 years necessary for engineering design and construction of the clean-up mechanisms.

Senator CHAFEE. Yes. I see the problem, but I also see the other side, which is, industry doesn't like it, and then they come in and sue and go to court and get you all tangled up. Therefore, there is never compliance. This has gone on for an awfully long time. I do understand industry's problem that they haven't gotten the guidelines so how can they comply, but frequently, the delay in the guidelines is that they have been harassing you people about your potential guidelines. Is that true?

Mr. RAVAN. I would hesitate to characterize it as harassment. Certainly, when you are working as hard as we are to comply with, first, the act; and second, court-ordered deadlines, you do not need an overabundance of letters, phone calls, and further attempts to extend the deadlines through court action.

I would simply point out that, Mr. Chairman, I think our performance most recently is indicative of some trust. I do believe that those industries with guidelines now in hand, have demonstrated that the guidelines work. While one may characterize it as harassment, the process is, indeed, complicated; it is very, very thorough; it is expensive, and it has been time-consuming.

Having said all that, with that guideline on the street, I believe industry is in a position to comply, and I would certainly agree with the subcommittee chairman and others that we do need an enforcement date for compliance.

Senator CHAFEE. All right. I obviously will spend more time on that before we are through. There is quite a difference.

Let's go to the Construction Grants Program, and Mr. Whittington can be part of this, if it is appropriate. There is obviously a great variance in what the administration has and what we have. You put in $6 billion, we put in $18 billion of Federal money, and ours extends over 9 years.

Under this, we provide $9.6 billion directly to the States, and the other for construction and $8.4 billion for the revolving fund. Now, we know that some communities won't meet the July 1988 deadline.

Do you think, Mr. Ravan, or Mr. Whittington, that the $9.6 billion will come close to buying out the Cores treatment needs of communities across the country?

Mr. RAVAN. Mr. Chairman, the core treatment needs estimate for construction does, indeed, vary between our number and yours. Clearly, the $6 billion as proposed by the President's budget is our number. This is our first look at changing the program, not only in terms of time, but in terms of entitlements as well. We certainly look forward to working with the subcommittee not only this year, but in the future as true core requirements are better defined, either under the proposal that we have submitted or what may finally emerge from the Congress.

I would hesitate this morning to say what the specific number is. I believe our own $6 billion figure, is the best estimate of necessary requirements.

Senator CHAFEE. And you are not sure one way or the other? I personally believe that the $9.6 billion will get, or certainly come close, to buying out the core treatment needs of the communities.

Mr. RAVAN. Yes, sir; I think the difference probably lies in definiation of core treatment, Senator Chafee.

Senator CHAFEE. Well, if you come forward with $6 billion and we say $9 or $9½ billion, then if you think your $6 billion is going to get it, isn't our $9.6 billion going to get it?

Mr. RAVAN. Yes, sir.

I believe your number will cover it plus a little.

Senator CHAFEE. Well, it is not that complicated in mathematics. So the answer is yes.

Mr. RAVAN. The answer is yes as to the core needs. I believe we are in agreement that whatever moneys are made available should be applied to those core treatment needs which drive water quality increases. Our only disagreement, basically, is the number.

Senator CHAFEE. All right. I am informed my time is up.

Senator Lautenberg. You have 8 minutes.

Senator LAUTENBERG. Thank you, Mr. Chairman.

Mr. Ravan, I am one of those who say that we are not going to have enough in here to do this job, as you mentioned in your comments. I have to ask you a question. You made reference to the 20-year period during which $50-some billion was spent by communities in developing their appropriate sewage treatment facilities.

What has been spent? Do you know, in addition to Federal Government funding since 1972, whether there has been any moneys that have come from local, State, or private sources to deal with the water problem?

Mr. RAVAN. Yes, sir, they certainly have. At least 25 percent; in some cases more than that.

Senator LAUTENBERG. That is 25 percent as a requirement of the formula, right?

Mr. RAVAN. Yes, sir.

Senator LAUTENBERG. How about funds? Would you be bold enough to say that there has not been any funding beyond that which is attached? Private companies are spending money on pretreatment systems, are they not? It is required, is it not?

Mr. RAVAN. I believe there are two sides to that, Senator Lautenberg. Certainly, with regard to municipal, public wastewater treatment, the investment beyond that required as a match for the receipt of the title II construction grant has been—I believe I could characterize it as minuscule—very, very minor, as opposed to the industrial investment, and, some of the that is in terms of pretreatment needs. The industrial sector has devoted a great deal of money, in excess of $60 billion, over that same period of time.

Senator LAUTENBERG. OK. So then your statement that the Federal Government has become the source for funding in substitution for other sources is somewhat in question because, in fact, there has been, and continues to be, a lot of money spent on sewage treatment facilities.

Mr. RAVAN. Yes, sir. One could, I believe, argue about the substitutionary effect of the Federal Grant Program. Our numbers show that the State and local governments, have done very well in putting up their local share. However, the major portion of funding was provided by the Federal Government, some $44 billion already plus whatever we add now. This will probably total approximately $50-billion-plus for the most recent 20-year period. This money is a substitution for the $50 billion or so provided in the previous 20-year period which was largely put up by State and local governments.

Senator LAUTENBERG. Yes. There is also a difference in awareness; there is also a difference in compliance required by law.

Mr. RAVAN. Yes, sir.

Senator LAUTENBERG. So the game has changed in relation to the arithmetic.

Mr. RAVAN. Yes, sir, significantly changed.

Senator LAUTENBERG. I have some questions I would like to get brief answers to. In EPA's future role in municipal wastewater treatment, the Agency concluded that the gradual transition was needed to increase the State and local role in wastewater treatment financing.

How does your proposal provide for a gradual transition? The effect of what you are proposing, I think, would almost cause a precipitous change in the character. How do you see it as a gradual transition?

Mr. RAVAN. Senator, given, quite honestly, some past performances of EPA in terms of change, even in some cases, a regulatory change, may, in fact, be characterized as the most normal thing we have done.

The administration proposal indeed, provides, for a 5 year, 1985–89, a phaseout period. Generally speaking, one can design and construct a facility in that period of time. So I would say it is a relatively reasonable period of transition.

Senator LAUTENBERG. Are you talking about individual project that have already begun?

Mr. RAVAN. Yes, sir.

Senator LAUTENBERG. But the need, of course, is substantially greater, you would admit that, than those that have already begun?

Mr. RAVAN. Clearly, Senator Lautenberg. In fact, the needs survey for fiscal year 1984, showed our Nation's need on the order of magnitude, depending on where you draw the line, up to $100 billion. I don't think there is anybody who believes that the Federal tax dollar can support every one of those.

So, it has now become a question of when, and how much.

Senator LAUTENBERG. The fact of the matter is that with that much legitimate need, the transition phasing looks like it is going to be fairly abrupt as opposed to gradual? I mean, for those that are in development, it is going to be gradual; for the others, it is a shock.

You are aware that in New Jersey, municipalities which are not providing adequate sewage treatment are currently subject to constructon bans in our State?

Mr. RAVAN. Yes, sir, I am generally aware that the State has that authority.

Senator LAUTENBERG. We have 70 North Jersey municipalities presently subject to bans on construction because of inadequate sewage treatment facilities.

It is a severe penalty on those communities. Development is there to be had, and we can't move ahead with it because these communities cannot adequately supply the sewage facilities.

Does the administration continue to support the requirement that the sewage treatment plants achieve secondary treatment by 1988? I didn't see that in your testimony.

Mr. RAVAN. Yes, sir, we certainly do.

Senator LAUTENBERG. How does the administration expect these municipalities to meet that kind of a deadline? Financing is not going to be there. It is impossible for these cities to be able to raise the funds, do the planning, et cetera, to comply with that if they are left to fund it on their own.

Mr. RAVAN. Senator Lautenberg, I would agree with you, first of all, that this is, in fact, coming right down to the horns of a dilemma. The promise of the 1972 water quality amendments seemed to say that, from the Federal tax dollar, there would come some percentage of support for new requirements, increased, stringent requirements, to achieve our water quality standards.

In fact, the law itself does not provide that the Federal tax dollar will forever purchase and pay for these requirements. As I tried to point out in my testimony, there may be some debate about the degree of the substitutionary effect, but as compared to industry and what they have done, our municipalities have, indeed, lagged behind, not speeded up.

One could hope that the Federal tax support for this program to the tune of some $44 billion, would have acted as an incentive to carry on with what had gone before. Actually, we saw the grants in most cases acting as a disincentive. In fact, the cities tended to wait—and this was as much EPA's problem as it was the cities—for the receipt of a grant, meaning, "I will clean up when you give me a grant."

The courts have already ruled on this; that approach is not the case although, up until 1984, allowed that perception, at least, to continue.

The fact of the matter, is the cities, as well as our industries, should be cleaned up to the degree necessary regardless of a grant. I think that was the intent all along.

Senator LAUTENBERG. Again, as we deal with the funding for these past few years, we are forced to examine the scope of not only awareness but a requirement to comply, and that certainly has enlarged in these last years. So, even though there has been significant support with Federal dollars, the fact is that relative to the objective, it is a smaller percentage, I think, than we saw being invested in the earlier 20-year period that you talked about.

Mr. RAVAN. Yes, sir.

Senator LAUTENBERG. I will come back again, Mr. Chairman. Thank you.

Senator CHAFEE. Senator Mitchell.

Senator MITCHELL. Thank you, Mr. Chairman.

Let me pursue, Mr. Ravan, just briefly the line of questioning that Senator Lautenberg started on. You argued in your prepared statement and in here repeatedly, the substitution argument. There is ome ambiguity in the figures you provide in your statement. The phrase you use is, "Prior to 1972, States and local governments paid for most wastewater treatment plant construction, $51 billon compared to $5 billion in Federal"—of course, prior to 1972, could be any period of time. You have used the phrase "20 years before," and "since." Obviously, there haven't been 20 years since 1972. Let me ask you specifically, what does the phrase, "Prior to 1972," mean, in point of time?

Mr. RAVAN. We studied the 20 years immediately prior to 1972, Senator.

Senator MITCHELL. This should more accurately read, "From 1952 to 1972."

Mr. RAVAN. Yes, sir.

Senator MITCHELL. Now, then, you use a figure of $44 billion has been appropriated, and as the Federal role in construction increased, the previously high State and local contribution dropped off. OK; $44 billion; is that from 1972 to 1984?

Mr. RAVAN. Yes, sir. That would incluide 1984.

Senator MITCHELL. All right. So we are now talking about from 1952 to 1972, $56 billion was spent, which was $5 billion, Federal; from 1972 to 1984, $44 billion was spent.

Now, you don't say what portion of that was Federal and what portion State and local. What are those figures, so we just get some kind of a comparison here.

Mr. RAVAN. Yes, sir. My statement should have been more complete, and it is only stated that way to try to be brief. The $44 billion is, indeed, the Federal tax dollar investment. There is, in addition to that, 25 percent from State and local governments, which would drive the——

Senator MITCHELL. Twenty-five percent of what?

Mr. RAVAN. Of the $44 billion.

Senator MITCHELL. $44 billion. What is the comparable dollar figure for State and local expenditures during that 12-year period?

Mr. RAVAN. $12 to $17 billion of State and local assistance, driving the total investment to approximately $57 billion during that period.

Senator MITCHELL. $12 to $17 billion. If you take the midpoint, it would be $14 or $15 billion; that would give you $59 or $60 billion. All right.

So, if I can summarize, because I have got some questions on this, what you are saying is that in the 20 years prior to 1972, a total of $56 billion was spent; $51 local, $5 Federal? In the 12 years since, a total of $59 billion was spent, $25 local, $44 Federal. Is that accurate?

Mr. RAVAN. Yes, yes. And if you will allow me, I will refine those numbers so that the record may reflect the totals more accurately.

Senator MITCHELL. Fine. Because it is very unclear from your statement, so we can know what the basis for your argument is.

Let me say that I am very disappointed regarding the administration's plan to terminate the construction grant program. As you know, I have joined Senator Chafee in sponsoring amendments to the act which provide a longer period, and as he has pointed out, establishment of a State revolving fund. At the same time, I am concerned that while loan funds may be appropriate for wealthy and financially secure communities, Mr. Poorer Community will not be able to support loans and will be at a disadvantage in an attempt to comply with the law.

In considering the loan fund concept, and I understand that was originally developed by EPA, have you considered the impact on financially stressed or relatively poorer communities?

Mr. Ravan. The worse the financial condition of the local community, Senator Mitchell, obviously, the worse the impact of diminishing Federal funds.

Clearly, the State revolving fund, and let me underline State, is a method whereby assistance could, in fact, be delivered to those smaller towns, especially those in distress.

Senator Mitchell. You understand that the EPA study of revolving loan funds suggests allowing States to use funds to either grants for loans and suggests a bonus program for States which set up loan programs. Could you describe, in your view, the relative advantages or disadvantages of a grant/loan option, and do you think that is one way of easing the impact on the poorer communities?

Mr. Ravan. Yes, sir. The State revolving fund concept was, indeed, a part of our look to the future funding of wastewater treatment at the Environmental Protection Agency.

The State revolving fund should have maximum flexibility, and the State, as it develops these funds, would provide for either loans or loan guarantees. Those revolving loans, in fact, may vary depending upon financial capability of the local community involved.

One way to set up the State revolving fund was as you described, and it was one of the options coming out of the study.

Senator Mitchell. Let me switch to another area now, toxic pollution. As you know, Senator Stafford's reauthorization bill provides an aggressive and expanded program to control toxic discharges. The bill places major responsibilities on States for the identification of water quality, limited segments, and adoption of effluent limits to protect those segments. At the same time, the bill looks to the EPA to develop additional guidelines for industries which discharge toxic pollutants in significant amounts. On that, I would like to ask you a series of questions, all related.

Would you describe the Agency's plans, if any, for development of additional guidelines? What industries will you address first? How many additional guidelines do you believe are needed, and do you have an overall strategy for development of these documents?

Mr. Ravan. Yes, sir; I would be happy to, and I will ask Miss Hanmer to interject if I should fail to completely respond to certain aspects of your question.

First of all, the issue of toxics is an important one. We look to a period of time beyond the implementation of BAT by industry. We look to a time when, those plumes being discharged will decrease based upon the fact that the BAT controls should be in place.

There are two significant parts of the act that should bring this about.

First, there is the list of 126 toxic pollutants, which are of principal concern to us as, and have been identified both by the Congress and the courts. Second, we are, indeed, refining, even now, our list of categories of gudielines necessary to control those toxic pollentants. Our knowledge and information, in this area is, indeed, incomplete. Monitoring data will be used to determine where the amount of toxic pollutants being discharged by an industrial category warrants the development of an effluent guideline. We will not hesitate to publish new effluent guidelines to help control toxics when necessary.

In the water column itself, we have begun serious work. We are probably 2 years down the road, now, on monitoring by living organisms in the water the effects of these toxic pollutants and what we should do to further control them.

Another area of work has to do with toxics and sediments and how those sediments may affect the water quality of the water above the sediments.

We are, indeed, finding that there are segments in water quality streams that are affected by those sediments, and what we may describe as toxic hotspots.

Miss Hanmer, would you like to add to that?

Senator MITCHELL. Let me ask Miss Hanmer: Given the Agency's past problems in the development of fiscal year guidelines, are you confident that you have the resources to develop, promptly, high quality guidelines in the area of toxics?

Ms. HANMER. Right now, we are placing our primary responsibility with our present resources, which would be for fiscal year 1985 and the proposal for 1986, on finishing up the effluent guidelines for what we in the enforcement program regard as the most important remaining categories, especially the organic chemicals industry.

As we are getting in the data from permit applicants, which have to supply to us data on the toxics contained in their discharges, we are continually identifying what new categories we may need effluent guidelines.

But, frankly, our highest priority is focussed on those guidelines that presently are under development and are not yet out, specifically, the organic chemicals industry and pesticides.

Senator MITCHELL. I have a number of other questions, is my time up?

Senator CHAFEE. Your time is up. Everybody will get another chance. We will have another round.

We are delighted that the ranking member of the committee is here, Senator Bentsen.

Senator, do you have an opening statement? If not, would you like to ask questions at this time, or both? You can do both.

Senator BENTSEN. Thank you, Mr. Chairman, I apolize for not being here at the opening, but we had a conflict in the Intelligence Committee, and I had to be there.

I would like to say that the idea of phasing out Federal involvement by 1990 and no new starts, I think, is much too abrupt, and I believe it is poorly planned to permit a successful continuation of the program. In fact, I think it would be unacceptable to the Congress and the States and to the American people.

Mr. Chairman, I would like to have my complete remarks in an appropriate place in the record, if I may.

Senator CHAFEE. All right, your statement will follow the other opening statements.

Senator BENTSEN. I would also like to ask some questions concerning new starts.

When you talk about eliminating all new starts, that is going to mean many new projects high on the priority list and necessary to meet the 1988 municipal deadline and other requirements would not be funded. Why shouldn't projects be allowed that can be completely funded during the life of the Construction Grant Program? Why shouldn't they continue to be eligible?

Mr. RAVAN. Senator Bentsen, as I pointed out earlier, clearly, at this time we are facing a deficit problem; our program is viewed as a contribution in trying to eradicate that problem.

Second, if all the resources available under this program are, indeed, dedicated to treatment needs, Core needs rather than some other new projects that might be started under the program, that is, interceptors, CSO's and the like, we believe that most of the Core needs for treatment which drive water quality needs, will, indeed, be met.

I agreed with the subcommittee chairman that the number for those Core needs is somewhere between our number and, I believe, your number of $8 billion.

Senator BENTSEN. Another one that concerns me is the administration recommending an end to the 20 percent discretionary authority of the Governor to fund categories of treatment works that would not otherwise be eligible.

I hope this committee does not accept that recommendation and that that 20 percent discretionary authority will be continued.

Now, if it is, the committee will consider clarifying that this 20 percent can also be used to fund the reserve capacity which is not otherwise eligible.

Do you see any pitfalls in that approach?

Mr. RAVAN. Senator Bentsen, the principal pitfall, I believe, goes to the same problem that Senator Lautenberg brought to the subcommittee. It is new capacity, so-called reserve capacity, in some communities and new capacity or new tie-ons in other communities.

Generally speaking, these needs are for new and developing areas. There are exceptions to that that I can address. However, for the most part, these needs tend to identify the growth path for new areas and communities, whose economic and growth opportunities are most likely able to bear the cost of extending the sewer system.

I would urge the committee, especially in an era of scarce resources, to make new tie-ons, the reserve capacity, new growth, et cetera, pay its own way.

Senator BENTSEN. Because of the limitation of time, I will not pursue that one, but I will go on to ask, have you discussed our viewpoint on the revolving loan fund provisions?

Mr. RAVAN. Yes, sir; We have discussed the State revolving fund extensively throughout the last year.

Senator BENTSEN. I mean this morning?

Mr. RAVAN. Yes, sir; to some extent this morning.

Senator BENTSEN. Why don't you elaborate on it a little more for my benefit, will you, please?

Mr. RAVAN. Yes, sir.

Again, let me emphasize the revolving fund is not a terribly innovative idea, but I think it does provide one way, as pointed out in our 1-year study effort, the States could, in fact, make the transition from a principally Federal-funded tax dollar program to a State and/or local program. The funds for the State revolving funds, as we pointed out, could come from a number of sources.

Senator **Bentsen**. Do you think you have enough flexibility? Do you think they are technically adequate as they are now stated?

Mr. **Ravan**. They would be technically adequate. Each state can best design the logic of the revolving fund to suit its needs. We are not mandating the design.

Senator **Bentsen**. You are recommending the authority to issue general permits for classes of facilities.

Mr. **Ravan**. Yes, sir.

Senator **Bentsen**. That is a major change in the act which doesn't allow general permits except under section 404 in limited circumstances. I can, however, see the general permits might be appropriate for some types of facilities.

Do you have specific examples where those general permits might be used?

Mr. **Ravan**. Yes, sir, we do. I will let Miss Hanmer give the specific categories. General permits, though, are a very good tool for the Agency.

Ms. **Hanmer**. As a result of a lawsuit in the midseventies, the court indicated that EPA, even though general permits were not specifically authorized in the statute, could use general permits as a tool in our permit program, and we have been using it as a tool in the program.

The largest category of discharges covered by general permits is the oil and gas drilling category in the outer Continental Shelf. In fact, if we were not using general permits for this type of permitting, we would have a great difficulty getting these permits produced at all.

Other categories basically include things like feedlots or cooling water. We would not use general primary for permits industries for example. General permits are most readily used for the types of discharges that are susceptible to engineering fixes. These fixes are the same for large numbers of industries, and in this way we can specify by rule what people have to do and have reasonable assurance that it is an effective way to regulate as opposed to giving them permits.

For the oil and gas drilling areas, I think it has been our most-used permitting mechanism.

Senator **Bentsen**. Yes. Thank you very much, Mr. Chairman. I will have some other questions.

Senator **Chafee**. Thank you.

Senator Symms, do you have a statement you would like to put in?

Senator **Symms**. No, Mr. Chairman.

Senator **Chafee**. Why don't you proceed with your questions?

Senator **Symms**. I thank you for being here, Mr. Ravan. I will carefully look back through your entire statement. I have just scanned it. I notice you make some mention in there about private treatment plants showing some hope for the future. We had some hearings in the Joint Economic Committee last year on the broad question of privatization as a way to reduce the Federal budget, and Parsons Corp., CH2M Hill, Morrison-Knudson, and other companies that are leaders in this tell me all the time that if we don't do anything to disrupt the tax code that the water treatment of this country can be taken care of by selling service contracts.

Are you working with Treasury to be sure that they don't recommend something that will do away with that opportunity? What does that look like to you in the future?

Mr. RAVAN. Senator Symms, we did, in fact, discuss this in our study for the program that was just completed. We, have had a number of discussions. Those discussions are ongoing with the Department of the Treasury officials. I must report that neither of us have reached any final conclusions with regard to the tax structure that might be needed or necessary or to act as an incentive or a substitution for the grants program.

Senator SYMMS. If I understand it correctly, Chandler, AZ, for example, is the one that they keep citing to me that they have sold a service contract. A private company, the Parsons Corp., has built a treatment plant, and then they operate it. I guess the only question which comes up is whether they have to have industrial revenue bonds to make it work?

I don't think they do, but what is your opinion on that?

Mr. RAVAN. Sir, I think that the necessary foundation for the so-called private approach is that you have to have two willing partners. You need a public entity of city, town, municipality, county, that wants to explore this opportunity, and you need a private concern that is committed not to short-term but to long-term improvements in that community.

After that, quite honestly, it simply boils down to service provided versus price for that service. I think this is a good idea. Two or three of our cities across the Nation are trying it. Actually, it is an old idea with regard to drinking water.

Senator SYMMS. Right.

Mr. RAVAN. Wastewater treatment, I believe, offers an opportunity in this area.

Senator SYMMS. The city of Boise for years has had a private drinking water treatment plant. They also have a publicly owned treatment plant. Morrison-Knudson, which happens to be headquartered in Boise, ID, a large engineering and construction firm, wants to get into this business of going out and doing the capital expenditures and selling long-term contracts and operating these plants for municipalities all over the country. There is a place in Alabama. Is it Brewton, AL?

Mr. RAVAN. Auburn, AL.

Senator SYMMS. Auburn, AL.

In fact, the mayor of Auburn was here last week talking about that. Are those working out well?

Mr. RAVAN. Yes, sir; they are showing real promise. Those two particular projects are in early phases and others may follow.

Again, I am simply suggesting to the subcommittee and to the cities and towns across the country that they might take a look at this option. It will not work for all cities and municipalities, but in some cases, it does, indeed, provide an opportunity for the future.

Senator Symms. It would appear to me that one way to help the budget situation is to open the door and share information and encourage this and not do anything with the tax code that would discourage this. I think that the service contract on a long-term basis is the key to it, so they could do that and then they could invest in the plans to have the normal depreciation and tax incentives for capital expansion and be in a profitable position and could go in and help clean up the Nation's water supply.

On another subject, I would like to, Mr. Chairman, submit a question on a problem we have in Lake Pend Oreille. The water quality continues to deteriorate year by year, and there is some discussion as to whether that is being caused solely by a pulp mill that is up river or also from cabins around the lake. I would like to submit a question to you on that.

Mr. Ravan. Yes, sir.

Senator Symms. If could, for the record. (See p. 53.)

My last question is on pretreatment. We have a problem in Idaho, as you may know, Hewlitt-Packard is a company that has joined with the city and pays them for some of their water treatment operations from a plant that they have in Boise. Yet if we adhere strictly to the national standards, then they have to treat the water twice. I think there is some 75 cases like this in the country. What is your position on that?

Mr. Ravan. Senator Symms, our position on that has not changed. However, I would like to further elucidate our position.

I believe that the pretreatment program, to date, in the Federal categorical standards actually is showing that it does work. It is time to follow the program th[illegible] presently on the books. I certainly urge the subcommittee to adopt this approach because while this has been a very, very painful and slow process we are, in fact, making good progress. With the publication of regulations to allow correction for the kind of situation that you have described if we don't need to treat it twice the pretreater can, in fact, get credit for having taken those steps. There is no need to charge the publicly owned treatment works a second time around.

Our regulation covering removal credits is available, and I would hope to work with your particular situation and others across the country to make certain that, in fact, it is not causing double pain where it is not necessary.

Senator Symms. So you think that we will be able to work that out?

Mr. Ravan. Yes, sir; I do.

Senator Symms. That is all we really want to do, is to have the water we put back in the Boise River be of higher quality than the water already in the river. We just want to get credit for the good job they have done out there. That is all the people are talking about.

I thank your very much.

Thank you, Mr. Chairman.

Senator Chafee. Senator, you have a little more time if you would like to use it?

Senator Symms. That is fine. Thank you.

Senator CHAFEE. Mr. Ravan, let's go back to the subject Senator Bentsen was discussing, namely, the task force about the future funding for POTW.

As I understand, you had a year's study on this matter?

Mr. RAVAN. Yes sir.

Senator CHAFEE. As you know, in the bill we have cited, we have this revolving loan fund?

Mr. RAVAN. Yes, sir.

Senator CHAFEE. I am sure you have had a chance to look at that. Under this, States must commit their funds to the projects within 1 year or they lose these moneys to reallotment.

Mr. RAVAN. Yes, sir.

Senator CHAFEE. That is what our bill provides.

Mr. RAVAN. Yes, sir.

Senator CHAFEE. Do you think this is a reasonable time for the States to establish these funds?

Mr. RAVAN. Yes, sir; I do. That might not be the case if we had not had the program since 1972, but at the present time, I think we have developed a priority list, water quality standards, permitting, et cetera. The requirement to place those funds within 12 months, I think would be reasonable.

Senator CHAFEE. Also, as you recall, these don't start until 1989. That is when, under our legislation, the funds come in.

In our bill, we have a 15-percent contribution that is required from the States to match the Federal contribution, 15 percent of the Federal. Obviously, we want to leverage as much as we can with the Federal contribution.

My question to you is: Do you think the 15 percent is reasonable? Should it be more? Should it be less, based on your experience with the past and your thoughts?

Mr. RAVAN. Sir, certainly. I think it would be reasonable. The State and local governments under the previous program were accustomed to paying 25 percent. Therefore, I would think that they would consider a 15-percent match reasonable.

Senator CHAFEE. Do you think it is a little low, even?

Mr. RAVAN. It might be a little low, yes, sir.

Senator CHAFEE. On the one hand, we want the States to have their own programs, and we don't want to saddle them with a lot of redtape.

On the other hand, we don't want Federal dollars squandered or spent on lower priority projects. We are walking this thin line here.

What would you consider an adequate assurance that a State is complying with the requirements? In order to receive the funds, the States have to agree to give adequate assurance to the Administrator that the treatment works is constructed prior to 1995 with funds from the revolving fund that will meet the same requirements applicable to grants requirements funded under the regular program. We have to get assurance from them that they are going to use these revolving funds with adequate assurance that they are going to be constructed in the proper fashion.

Mr. RAVAN. Yes, sir.

Senator CHAFEE. What do you think we can get out of that?

Mr. **Ravan**. Mr. Chairman, our study of that point actually deals with both dollar availability as well as what I would refer to as, the regulatory burden. Some people would simply call it redtape.

I believe that there will come a time when our proficiency and technology of building wastewater treatments in this country is adequate, at least to the point that this regulatory burden can be relieved. Your requirement to carry through 1995, to me, as I examined the program this last year, seems to be a bit long.

I would suggest that the first time around, in other words, the first use of the money out of the revolving fund might very well carry with it the requirements that you suggested. However, I believe there also must come a day, hopefully, as quickly as possible, when the States would be given absolute flexibility for utilization of these funds, and I would only want to audit for basic honesty and the purpose of the grant.

Senator **Chafee**. Under the current law, as you know, we have the minimum of 4 percent for the innovative and alternative projects.

Your bill deletes the I/A completely.

Why do you do that, because of the short-term phaseout or you don't think the I/A is working well?

Mr. **Ravan**. The earlier, Mr. Chairman, I believe that our focus should be upon treatment coordinated with available dollars. That is, in fact, our reasoning. The I/A Program has seen some successes, and we are not philosophically against I/A.

Senator **Chafee**. Yes, except if you eliminate it.

Mr. **Ravan**. Only because we would like those dollars to be focused upon treatment.

Senator **Chafee**. I never understood that the I/A was not involved with treatment, just an innovative approach. I remember when we first put that in here. We were trying to get people to get the communities to try something different instead of putting the plans off the shelf somewhere.

Mr. **Ravan**. That is right, sir, especially with regard to land treatment types of systems, and smaller types that did not need physical-chemical treatment.

Senator **Chafee**. That is right.

Mr. **Ravan**. Again, as the administration proposal that we have for you this morning, is asking for funding for those present, ongoing phased, segmented projects, which are, indeed, for the most part, aimed toward treatment.

Therefore, the I/A 4-percent provision would be eliminated.

Senator **Chafee**. Has it been your experience—and you have looked at this with a 4 percent mandatory I/A—that States have gone to lower priorities than they normally should have in order to get the 4 percent?

Mr. **Ravan**. No, sir; I would say that the program has been fairly well balanced. We have had States that took maximum advantage of the 4 percent, and we have had States that did, in fact, lose money on reapportionment, reprogramming.

Senator **Chafee**. Did any of the States go up to 7.5 percent which they could have done?

Mr. **Ravan**. We don't believe so, Senator, but I would be happy to submit more information on that for the record.

Senator CHAFEE. I guess my specific question to you is: How do you think the I/A's worked out? Has it produced anything exciting?

Mr. RAVAN. Nothing specific comes to mind, Senator, that really was exciting, or a major breakthrough for treatment technology. It is more likely that I/A has provided for alternatives, better alternatives, perhaps, in some instances, for communities.

We are not philosophically against the I/A proposal.

Senator CHAFEE. I am informed my time is up.

Senator Lautenberg.

Senator LAUTENBERG. Yes. Thank you, Mr. Chairman.

Mr. Ravan, has the administration done a thorough study on the effect that your proposal would have on user fees in the urban areas of this country with large needs?

Mr. RAVAN. Senator Lautenberg, the proposal I have before you with the $6 billion phase-out, is that what you are referring to?

Senator LAUTENBERG. Yes.

Mr. RAVAN. No, sir; I don't believe there is a thorough study.

Senator LAUTENBERG. There is a suggestion in your report that user fees might be one part of the resources necessary to fund the projects in the future.

Mr. RAVAN. Yes, sir.

Senator LAUTENBERG. I would suggest, Mr. Ravan, that without some idea of what those fees might be like attacks the credibility of your recommendation. If user fees go through the roof, it limits growth potential, it imposes a terrible burden on the older cities and the urban areas.

In EPA's recent report on Federal and municipal wastewater treatment, EPA concluded that a gradual transition was necessary to increase the State and local role in wastewater treatment financing. I believe that the administration's proposal fails to provide adequate assistance, as I earlier said, therefore, prevents gradual transition.

The proposal leaves local municipalities, which have been waiting for Federal grants, facing the prospect of sewer bans. Your proposal will also result in retarding the growth essential in the President's perspective on how we finance our way out of debt, and that is, through growth in our economy. Many municipalities will just have to slow down in terms of their own development.

We have, in New Jersey, over $3 billion in unmet needs for eligible facilities, just to make the point to you, Mr. Ravan, as you review the proposal you have made to us.

The EPA task force report suggested a 10-year program to establish a revolving loan program; is that correct?

Mr. RAVAN. Yes, sir.

Senator LAUTENBERG. What was the basis for 10 years as opposed to any other period?

Mr. RAVAN. Senator Lautenberg, the time period that is, in fact, tied to the amendments of 1981. Those amendments, as you know, were fully implemented October 1984, and some sort of time period looking toward the period 1981 to 1991 or, indeed, 1984 to 1994 seemed to us to be at least a good study period for the work that we were doing with regard to that task force.

Senator **Lautenberg**. So, therefore, if there is any challenge to that particular time cycle, it is whether or not 10 years will provide the funding adequate to the States to fund the necessary treatment work, something that concerns me a great deal.

This goes back to an earlier question. What effect would the switch from grants to the revolving loan fund suggested by the report have on local sewage rates? Do you know? Do you have any idea what that might be?

Mr. **Ravan**. Senator, clearly, the so-called sewer ordinances and/or sewer rates or user charges as they are variously termed in the trade are going to have to increase. One of the aspects of a large Federal assistance program, as had been the case, we have noted, is that user fees, as such, for the sewer service provided are, indeed, low, and in my opinion, too low.

Senator **Lautenberg**. Do you think the users would agree with you?

Mr. **Ravan**. Some users will disagree heatedly because they have experienced user fees, especially on the sewer side, in past periods of this program.

However, my own experience over this same period of time, having been involved with this program both publicly and privately since 1971, tells me that America's best bargain today is, indeed, the clean water that we have provided, and, in fact, especially in our urban areas, we should, indeed, be willing and ready to pay for the service provided at the local level.

I don't believe that the consumer gets his or her best deal by arriving at those dollars through the Federal system.

Senator **Lautenberg**. Except that what we have is a national problem. The effects of having untreated or improperly treated water flowing into the estuaries and ultimately into the total aquatic system is something that affects everybody, and you just can't restrict its result to the local community.

One could take a narrow view—it has been done lots of times—to say, "To the devil with it. We will just get rid of it," and eventually it winds up some place else.

So, therefore, it does cause the Federal Government to be involved in a very significant way. I don't think there are bargains out there when we look at what we have to pay for municipal services, whether it is the safety service or trash removal, et cetera. It costs communities a lot of money to deal with problems of this nature and especially one that affects the world we live in. I think it is pretty easy to say that the fee has got to be paid whether it is paid to Government and then transmitted back or whether it is going to be paid by way of user fees directly.

There is no fee disposal, as they say.

The report says that the heaviest financial burden for wastewater treatment would fall on the older urban areas; correct?

Mr. **Ravan**. Yes, sir.

Senator **Lautenberg**. It says many communities in that report cannot afford to meet all of the costs for wastewater treatment facilities through user fees alone. How did the task force proposal address those problems?

Mr. **Ravan**. We saw, Senator, that there would be generally, three categories of financing for the future.

First, the categorical grant under title II which is presently available for some phaseout period of time would, indeed, provide, regardless of whose number you use, some $8-plus billions for that remaining program.

Second, there would be the need for, because of the conclusion you have just pointed out, a State revolving fund and/or some sort of mechanism for assistance for the local communities, especially those who are, in fact, unable to meet the full load.

Then, third, there would be, as Senator Symms pointed out, an opportunity for the private approach to meet the wastewater treatment needs. Those three categories are what we suggest.

Senator LAUTENBERG. We would hope that those on whom the burden falls can handle their fair share of it. I am not optimistic that we can do that, and I think that the communities are going to be in for some shock when they see what their responsibility is going to be: their costs for providing these. Many of these communities have problems with credit anyway, and to be issuing bonds supported by a revolving fund to whom they have to repay their obligations can seriously strain the creditworthiness of the ability of these communities to borrow to handle this and repay the revolving fund.

Thanks, Mr. Chairman.

Senator CHAFEE. Senator Mitchell.

Senator MITCHELL. Thank you, Mr. Chairman.

Mr. Ravan, in a recent report to Congress, the EPA indicated that as much as half the remaining water pollution problems are attributable to nonpoint sources of pollution; that the administration has put forward a program which provides no grant support or practically no staff for dealing with nonpoint pollution. Beyond that, the Agency has opposed amendments to the act to address nonpoint pollution.

First, let me ask you: Don't you agree that nonpoint pollution is a serious national problem?

Mr. RAVAN. Yes, sir, I do. I would refer to those statistics, if I may. I believe 17 of our States have remaining problems in attaining water quality standards. In over 50 percent of those 17 States, the problem is nonpoint sources.

Senator MITCHELL. Is it not a problem in the other States?

Mr. RAVAN. Yes, sir; there are areas where nonpoint source is the problem.

Senator MITCHELL. I understand that the Agency recently developed a nonpoint pollution policy which calls for better coordination of Federal agency activities related to nonpoint pollution control.

Does that policy provide for any mandatory action by Federal agencies to assure these programs and budget will implement the policy, or is it essentially a voluntary program?

Mr. RAVAN. It is, in fact, essentially voluntary.

Senator MITCHELL. What we have here is clear evidence of a problem, the EPA not acting, and if the attempts to implement the voluntary program don't succeed, and I must say, past experience with that has not been very good. I think it is time to do something about it, and I think personally that the nonpoint source provisions of S. 53 are a good start.

Now, several environmental groups have recently suggested to this committee that we consider making implementation of nonpoint pollution control problems eligible, construction grant funds, if the nonpoint program would be cheaper than the cost of advanced wastewater treatment. Would you support funding of nonpoint programs with title II funds if needed pollution control could be achieved at a lower cost?

Mr. RAVAN. Sir, given the administration's proposal for phasing out of the construction grants program, I doubt that it would be a good time to add new eligibilities to that particular entitlement. That does not take away from the necessity to address nonpoint source pollution broadly across the Nation.

Senator MITCHELL. That last sentence hardly squares with the policy that you have proposed and your position by any effort on the committee to do it.

Mr. RAVAN. I believe Senator, if I may just address that policy for a moment, what we found, again, in a very concentrated effort over the past 12 months on nonpoint source was that if, indeed, the Federal Government first; and perhaps State governments thereafter; and local governments thereafter, would simply utilize the dollar as well as other resources that they have presently available to them, we could take substantial steps toward the alleviation of nonpoint source pollution. As you know, the five major categories of nonpoint source have to do with constituencies across the Nation who, I believe, indeed, can do something about nonpoint source pollution. And, if the Federal departments, with available resources, would simly tune the application of those dollars so that nonpoint sources would first be eliminated or alleviated, we would be a long way toward controlling our nonpoint source problems.

I am not suggesting to you or anyone else that this will cure our problem, but it will certainly be better than anything else we have seen today.

Senator MITCHELL. Of course, wishing for somebody to do something is a long way from having them do it. I think overall, your comments really support the need for some action as proposed in the legislation to which I referred. I would like, if I could because of time constraints, to go on to another area, and that is the permit terms.

The proposal for extending of NPDES permit terms from 5 to 10 years has been an area of considerable debate and concern, as you know. EPA and the industry argue that longer terms are needed to prevent permit backlogs and provide relief.

On the other hand, environmental groups and other groups are concerned that the delay will slow the implementation of toxic controls. Do you agree that the 10-year permit will delay implementation of toxic controls? If so, what is your comment on the proposal on the idea of limiting 10-year permit terms to those permits which address conventional pollutants which retain a 5-year period for toxic controls?

Mr. RAVAN. Senator, I believe the 10-year permit, first of all, is a good idea. I am basing that on experience in the program today, as well as what we know and understand about the implementation of BAT controls first, and then toxic additional controls thereafter. Also, I think it is important for the subcommittee to understand that our proposal suggests a 10-year permit only in those cases where, in fact, we know all there is to know about that discharge.

In any other case where it was necessary to meet water quality standards, effluent toxic controls, dual information availability, et cetera, we would, in fact, do that. I believe the only gap in this is a certain amount of, if I may use the term, faith that we would, in fact, do that.

I would like to just tell the subcommittee again that EPA is, in fact, committed to this. I believe the 10-year permit is a good idea when implemented along the lines that we are proposing.

Senator **Mitchell**. Would you have any problem with us writing that into the law?

You said you are going to do it anyway. You obviously wouldn't object to putting it into law, would you?

Mr. **Ravan**. Senator Mitchell, we are, in fact, suggesting certain language to go along with the 10-year permit.

Senator **Mitchell**. I would like to turn to another area of the turnkey project. The State has undertaken a number of treatment construction projects without Federal assistance. The State found that they are able to substantially reduce project costs by allowing a single contract for design and construction of a plant termed, as you know, a turnkey project. In one case, I am advised, preliminary cost assessment for the design and construction of $6 million was reduced to $2½ million when bid as a single project. Other States have had similar experience. Yet EPA will not allow single contracts for design and construction in federally assisted projects.

My question is: Does the EPA have substantive objection to turnkey project management, or is its opposition based on a belief that there is a lack of legal authority to authorize such a project?

Mr. **Ravan**. Senator, I don't believe this comes from a legal basis, no, sir. I do, in fact, believe that the administration's proposal for the phaseout of our participation, is premised on directing those funds to ongoing present-day projects.

Senator **Mitchell**. But, Mr. Ravan, the purpose of the phaseout is to save money. Here is a way, which I gather you do not dispute, which can save money. Yet you are opposing it, which seems to me to be rather contradictory.

Mr. **Ravan**. Not necessarily, Senator. Your State's experience in this program actually does differ from all reports that you can get with regard to so-called turnkey projects. We have found, in fact, especially with regard to smaller communities, that having separate design and construction firms, and sometimes even a separate operation and maintenance firm is, indeed, a safeguarded approach to achieving what you really want, which is, cost-effective achievement of permit effluent requirements.

Senator **Mitchell**. That is a different argument. Now what you are saying is that there is a factual disagreement, that is, you disagree that savings can be made by having turnkey projects.

Mr. **Ravan**. I think each project should be judged on its own merit with regard to turnkey. I do believe that different States and different localities actually have different experiences from the one you described.

Senator **Mitchell**. If you believe that, then implicit in your statement is that in some cases, there have been savings, and I guess what I am saying is, why not have that option so that at least in the cases in which it appears or can be agreed that there will be savings, the savings will be accomplished? I mean, $3½ million is perhaps a small sum in a multibillion dollar program, but it is still taxpayers' money, and if we could save just $3.5 or $4 million on a project here or there, it is a savings that I think everyone would be interested in.

Mr. RAVAN. Let me categorize that, Senator Mitchell. I don't think we are philosophically against any savings that might be incurred. I believe also that States, especially as they take on not only the responsibility but the burden in accountability for these projects, should have maximum flexibility. If they want to do turnkey projects in a particular State, they ought to have that opportunity.

Senator MITCHELL. If I could say why? You see, what they don't want is a program that works better because then it is harder to phase it out, and since their primary objective is phasing out the program, they really don't want to consider proposals that will make it work better, because the better it works, the harder it is to eliminate it. That is what is troubling about this.

Mr. RAVAN. Again, Senator, I have no philosophical difference with you. In fact, I would like to see the States, as they take on this program, design the flexibility into their program that they deem appropriate.

Senator MITCHELL. Are you familiar with the design/construction provisions of H.R. 8, the House authorization bill?

Mr. RAVAN. No, sir, I am not, but I can look at them.

Senator MITCHELL. Would you take a look at them and then provide us with a response in writing as to whether you think those are acceptable?

Mr. RAVAN. Yes, I will.

Senator MITCHELL. Thank you, Mr. Chairman. I have some more questions. I will wait for my next turn.

Senator CHAFEE. Mr. Ravan, when we put the 10-year amendment on permits, we thought we came up with a good program. Many permits under this would get a 10-year lifespan so that both the permit-writing agency, EPA, and the permit holder would save some resources. That was the objective of it.

On the other hand, permits would have to be reopened and revised if new effluent requirements or water quality requirements came into force. So we wouldn't lock in inadequate controls over 10 years. I think you mentioned that.

Now, some people are telling us that in many cases, permits would not really be reopened, so that we have just given away the story without getting anything in return.

I am confident that this is going to be raised in the next 2 days of these hearings. What do you think about this?

Mr. RAVAN. Mr. Chairman, I believe that the negative side of that arugment, that is to say that the 10 years would not be reopened, is simply a question of how EPA and the States——

Senator CHILES. That is the problem. It is the States. Let's set aside EPA for a moment. Let's assume that EPA would reopen them, but the argument is that the States are very unlikely to promptly revise all the permits on a river when the water quality standards are upgraded. Instead, they will write the new permits one at a time when the old ones expire. That is the argument you are going to get.

Can EPA force the States to reopen the permit?

Mr. RAVAN. Yes, sir, I think if we saw that as a requirement we could. Obviously, the regulations that are going to go along with the 10-year permit, will I believe provide a substantial impetus for good faith actions on the part of the State.

Senator CHAFEE. Beckly, do you have any comments on that?

Ms. HANMER. I would just like to say that we don't regard 5 or 10 years as an either/or proposition. We would see developing the process through regulations to specify appropriate permit terms. We may limit, for example, a full 10-year permit to certain categories of dischargers whose discharges are not likely to change, who represent well-known situations, or situations where, when we get ready to reissue the permit, we are not likely to make many changes. So we would, I think, want the flexibility to choose permit terms of less than 10 years.

We don't want to be under the pressure of just having people come in and say, "You own us 10 years." I think the way we would do it would be through reopenings. I think our preference would be for discretionary rather than mandatory reopenings, which would be defined through regulations, permit terms, and appropriate terms for reopening. Those regulations would apply equally to the States.

Senator CHAFEE. This is obviously going to be a major bone of contention in the next 2 days. Our problem is that the States have such a backlog that the concern is—and many of those who I think will testify will raise this point—the States have a large backlog and they are just not going to get to it. Wait until the 10 years is up, and the automatically reissue some kind of a permit.

Ms. HANMER. The staggered term I mentioned is one way to deal with the situation of the cyclical workload. If we set permits we would set different sections, and different types of permits for different permit extension terms. Then we could even up the workload, which would help both us and the States.

Second, the States, I think, went into a period, as we did, in which permit writing wasn't very important. We have been getting some impressive results, though; not perhaps full results, but very impressive results once we started to put a priority on this activity. The States have doubled their permit-writing activity from last year to this.

Senator CHAFEE. OK. I suppose you could have different permits, also, for conventional, toxic pollutants, too.

Ms. HANMER. That is how we would do the categorization, basically, by types of discharges.

Senator CHAFEE. All right, Mr. Ravan, what steps are you taking to ensure that new regulations are being implemented? I am particularly referring to the water quality standards, and we had a go-around, as you recall, with the Administrator last year on this and some revisions he did not want us to implement into law. What I am talking about specifically is with respect to the adoption of criteria for toxic pollutants and the mandatory stream-upgrading requirements.

Mr. RAVAN. Senator, we feel very confident and very strong with regard to this water quality regulation. I think we did, in fact, keep good faith with the Congress and our duties to the American people in the publication of that regulation. We continue to take the actions, I believe, which are necessary to clearly indicate to the States as well as the dischargers that we fully intend to carry out the water quality regulations.

We briefed Congress recently on section 24, where we are, indeed, withholding grants funds because the water quality standards have not been reviewed adequately in a 3-year period as required. We, in fact, didn't necessarily coin the term, but it nevertheless exists that there is a "watch list" where water quality standards, could, in fact, become of such major concern that you would pull the program.

We believe that in future years, this water quality regulation is going to be strictly and properly enforced. We are going to be taking steps, along with the States, to ensure that good water quality standards are maintained and will included the toxic requirements as they become known to us.

Senator CHAFEE. We understand that some States want to downgrade the designated use of their streams because of lowflow conditions. Could that be permitted under the present regulations, the downgrading of those streams?

Mr. REVAN. Senator Chafee, there are six methods or categories by which a State could and should consider the water quality sandards any any necessary, revisions of a water quality standard whether, in fact, it would be upward or downward. One of the those is, indeed, a low-flow condition, which is characteristic of some of our Western States, especially in the upper reaches of very small streams in the summertime conditions.

If, indeed, the scientific evidence was clear, both to the States and to ourselves, that a low-flow condition was, indeed, the problem, many of these streams—could, in fact, be downgraded. We are working on this particular item with some of the States involved, and we simply want to assure you and them and anyone else that this will be one basis of scientific finding.

Senator CHAFEE. Yes, but the objections, as I understand them, are that to get the downgrading that they seek, I guess it is western states based on the low flow, that they have to go through a public hearing process, and they say this is too long and complicated. They are advocating that we give the States the right to weaken the clean-up controls which you set and do this through the permit process. Isn't this a back door way of downgrading water quality standards?

Mr. RAVAN. Sir, let me address those two points in particular. Let me take permitting first. This, to me, is sort of getting the cart before the horse. The permit is an enforcible instrument; it is a basic tool of the water law itself, and it is not intended as the instrument by which we change water quality standards. It is just the reverse. The permit should be used to achieve the water quality standard that has been previously set.

If one now wants to deal with the water quality standards as set and approved, as set by the State and approved by EPA, let's deal with that. If, in fact, that requires a public process, I think that is good, and I believe that a good faith action on the part of the State, other permittees involved, and EPA will alleviate the problem.

It is, indeed, difficult to go before a "public" with the pronounced intention of "downgrading" the water quality standards, whereas it may, in fact, be necessary to identify to the public that quite honestly, a mistake maybe has been made, and that on the basis of scientific evidence, in an unbiased form, such as a public hearing, we can arrive at the facts and base our decision on the facts.

Senator CHAFEE. Do I understand you are saying that you think we ought to stick by the public hearing process?

Mr. RAVAN. Yes, sir, absolutely.

Senator CHAFEE. Well, good. Thank you.

My time is up. Senator Lautenberg.

Senator LAUTENBERG. Mr. Chairman, I will try not to take too long. I, too, want to make certain that you are aware of my concern about the extension of permits. It seems that we all share that, because it is a potential for having an adverse effect on water quality. Are you familiar with a National Wildlife Federation study that suggests that 18 States only review water quality standards when they renew permits? Is that familiar to you?

Mr. RAVAN. No, sir; I'm not familiar with that statistic.

Senator LAUTENBERG. I think it would be of interest for you to get it. It shows how little attention there is paid to these things. Do many States have water quality standards for toxics other than heavy metals, do you know?

Mr. RAVAN. Miss Hanmer will address that point for you, Senator.

Ms. HANMER. Very few States. Most of the State standards have limits on certain heavy metals; a few have limits on others, such as a few pesticides. By and large, they do not have a lot of specific chemical limits.

However, all State standards do have a narrative provision that limits toxics in toxic amounts, which allows us, when we are permitting, to make case-by-case decisions if we have a discharger whose discharge causes toxicity in toxic amounts. We can deal with that in the permitting context even if we don't have all the toxic limits and the standards we would like to have. And we are trying to do so.

Mr. RAVAN. Yes, sir; we are.

Senator LAUTENBERG. To a favorite subject of mine, again, Mr. Ravan, EPA has so far promulgated only skeletal criteria governing the management and disposal of sewage sludge from publicly owned treatment works. What is the current status of EPA's sewage sludge guidelines?

Mr. RAVAN. Senator, we are, indeed, finally happy to report that we are on a course and we are making good progress. We have divided, as you know, the sludge regulations into two broad categories: One, the institutional regulations necessary to set up sludge programs. Second the so-called technical regulations describing to the permittees what we might find acceptable practice with regard to the disposal techniques. The first regulation, the so-called institutional regulation, will be proposed this year. I will ask Mr. Whittington to give you the specific month but it will become final in 1986.

The technical regulations, which is, indeed, the more complicated regulation, will be proposed next year in 1986 and become final some 12 months thereafter.

Bill will now give you the specific month.

Mr. WHITTINGTON. It will be proposed in August, Senator.

Senator LAUTENBERG. Proposed in August?

Mr. RAVAN. And the technical regulation would come in March.

VOICE. June.

Mr. RAVAN. June 1986.

Senator LAUTENBERG. I take it that that is a schedule that you think meets the concerns that we have? Why is it that there is so much by way of sequential study, benchmarks, et cetera, that you have to pass?

Mr. RAVAN. Senator, I believe that, as I have testified before to this subcommittee, your patience has been commended by us on this subject. We have, indeed, been slow with regard to this sludge question. I believe approximately 18 months to 2 years ago, the previous Administrator of the Agency gave clear direction and accountability. He held the office of water accountable for those regulations. We are on a very closely managed schedule for the publication. We are keeping members of the committee well informed on this. I do not now perceive any further delays. It is very important that this Agency be as nearly correct with all the facts as we come forward with the regs.

Senator LAUTENBERG. Right.

Senator CHAFEE. Senator, could I intervene one moment, please? I have to go. Senator Mitchell is good enough to take over and wind up the hearing. Tomorrow we will start at 9:30, and the following day, also, at 9:30, with the objective of finishing up before lunch. I want to thank everybody for coming. Thank you, and thank you, Senator.

Senator LAUTENBERG. Mr. Chairman, I will go on for the brief minute more I promised you and not more than that.

What guidance might these regulations give to those POTW's which currently have no land-based alternatives for disposing of sewage sludge and they are dumping sludge into the ocean? Do you have any feel for where we are going with that?

Mr. RAVAN. Senator, I believe that there are at least five major methods for the local community which would be regarded as acceptable practices. There will always be a continuing debate as to whether or not a local community has any on-land options. With further public discussions, I believe incineration, will become an available option. Obviously, included in that option is the question of cost, and whether cost will, in fact, drive some communities to continue to look toward ocean disposal of sludge.

One thing that is clear to us is that, paraphrasing "The Ancient Mariner," if I may, there may be sludge, sludge everywhere and you won't know what to do with it, unless EPA does, in fact, come forward with this guidance for the cities.

I would hope, and I sincerely believe that the oceans are not going to end up as the path of least resistance. Further, all of the pretreatment study and work that has gone on to date inside the Agency along with the regulated community will help to alleviate some of the serious problems that we face with disposal of sludges in the past.

Senator LAUTENBERG. Would you agree that the ocean, as a final dumping ground for sludge material, can only survive as a transitional opportunity and that in the long run, we ought not to think of that as an alternative at all?

Mr. RAVAN. I certainly agree, Senator. As I have said many times publicly and testified before this committee and others, I would hope that the environmental ethic that the American people have developed on land is not disposed of as we march off to the oceans.

Senator LAUTENBERG. Yes, a little out of sight.

Mr. RAVAN. Yes.

Senator LAUTENBERG. That is a little out of sight. And, so to speak, out of mind. Last Saturday, as I stood on the New Jersey beaches, I was presented with a gift by a local fisherman of a gallon jug of material taken out of the ocean that was so thick that it almost wouldn't come out of a widemouthed jug, and it was the ugliest material you ever saw. You wouldn't put your toe in that water, much less immerse yourself totally in it. I know that there is a decision coming on the removal of the current 12-mile sludge dump site off the New Jersey coast to a much further area, one that has better dispersal quality, much greater depth, and as a temporary measure, I would like to call it, would serve better for the acceptance in the ocean of this material.

It was originally an April 1 deadline. Do you know when that is coming, Mr. Ravan.

Mr. RAVAN. Senator, I have committed to you and to others that we are going to meet the April 1 deadline.

Senator LAUTENBERG. Is that so? I thought Lee Thomas, when he was here, said it might slip. But I would take your word anytime that we are on a track to have a decision by April 1 on whether you recommend the closing or not of that 12-mile sludge dump site.

Mr. RAVAN. I believe I have an exciting 7 days ahead of me.

Senator LAUTENBERG. I think so. But I trust your integrity. You said it once. We are not playing Simon says. You can say it again and we look forward to hearing that word from on high. Thanks very much, Mr. Ravan. Thanks, Mr. Chairman.

Senator MITCHELL [presiding]. He trusts your integrity and takes your word because you agree with him.

Senator LAUTENBERG. He better.

Senator MITCHELL. If you start disagreeing, then your status will change.

Senator LAUTENBERG. We would hate to see that Atlanta region without any funds to operate.

Senator MITCHELL. Mr. Ravan, I have two other areas I would like to address with you. The first is protection of lakes. As you know, there is evidence of serious pollution problems in fresh water lakes. A recent survey by the Association of State and Interstate Water Pollution Control Administrators found that lakes are the only water resource to record significant declines in water quality between 1972 and 1982. Water quality declined in four times as many cases as it improved.

A survey by the North American Lake Management Association found that reported lake pollution problems have increased about fourfold since the early 1970's. Despite this evidence, EPA has proposed to end funding for the Clean Lakes Program for the past several years, and in every case, of course, as you know, Congress has restored funding for the program. So I have really a two-part question: Are there any changes to the current program you feel might be appropriate to make it work better, and if we were to make those changes, could we not proceed with some type of reasonable program given the problem rather than continuing this impasse in which you request no money and we insist on giving you money which you say you don't want?

Mr. RAVAN. Senator, I am not today and I see no occasion in the future where I will be suggesting changes to the Clean Lakes Program. The fact of the matter is, it is the 50 percent grant that has induced a lot of community spirit. Especially on some of the urban localized primary recreation kinds of lakes, there has been good progress.

I do not differ with you on the characterization of the funding. The difference is primarily one that the Clean Lakes Program was supposed to be a demonstration program. We have, I think now, demonstrated to the tune of some $87 million in the program, and the administration continues to feel that it might be appropriate, along with the other budget reduction efforts, to allow the local communities, where they feel that this is a priority, to go ahead and provide funding to complete the project.

Senator MITCHELL. So if I understand what you are saying, it is that you do not disagree that there is a problem?

Mr. RAVAN. I do not disagree with that.

Senator MITCHELL. With what I have stated? You do not disagree that this program has worked to alleviate the problem where it has addressed it?

Mr. RAVAN. That is correct, sir.

Senator MITCHELL. Your desire to terminate the program is based upon two facts. The first, obviously, the dominant fiscal concern?

Mr. RAVAN. Yes, sir.

Senator MITCHELL. And, second, that it was supposed to be a demonstration program and, therefore, should be limited to that, notwithstanding the first two statements that I made. Is that a correct statement of your position?

Mr. RAVAN. Yes, sir; that is correct.

Senator MITCHELL. Fine. As you know, many lake pollution problems are attributable to nonpoint source pollution. I would like to have you address for me, and perhaps you might want to do this in writing after giving it some thought, how we might coordinate the clean lakes and a nonpoint pollution program.

I recognize that you are not for either one of them in the current status, but what I am asking you to do is to assume that the Congress will be and help us structure a workable program. I think that is a fair request to make. You have stated a position which we understand, and insisted on a program. So now what I am saying to you is if that is the case, notwithstanding your opposition to it, why don't you give us your thoughts on how we might make it a better program, if we can do so?

Mr. RAVAN. Senator Mitchell, I would like to do that. If I understand what you would like for me to do, I can exclude the question of how that program might be funded.

Senator MITCHELL. That is right.

Mr. RAVAN. And at what levels that might be funded.

Senator MITCHELL. All right.

Mr. RAVAN. I would be happy to supply that for the record.

Senator MITCHELL. That would be very helpful for us. We disagree reasonably, and you have a very agreeable staff and yourself, we may draw different facts and a different policy conclusion, but in all of our interests, and the interests of the American people, if we act contrary to that, contrary to the policy you express, it is that we should do so in the most reasonable, productive, and efficient manner.

Mr. RAVAN. Yes, sir; I will be happy to do that.

Senator MITCHELL. Finally, I would like to turn to the area of administrative penalty. Proposed to the act are areas which would substantially increase penalties for violations. In addition, the EPA would be given the authority to assess administrative penalties of up to $10,000 a day. I believe that you do need broad and effective enforcement powers to implement the act.

But as a former Federal judge, you will forgive me for having some concern about the assessment of penalties upon American citizens outside the judicial process, especially since $10,000 there is a very substantial penalty. There are many very serious crimes which can be committed which have substantially smaller financial penalties than that. I would like to ask you, with respect to that, and I want to make clear I am not at this point opposed to it, but I think I need some more details and more justification. I will ask you a series of questions which you can either address now or may wish to address later in more detail.

Those are: Has the Agency formulated any plan about how you will manage an administrative penalty program? Are there activities, are there areas of activitiy, in which such penalties are particularly necessary or appropriate?

Finally, how liberally within the Agency would authority to assess such penalties be delegated? What person or persons would have the authority to do this?

Mr. RAVAN. If I may, let me address those three questions very briefly Senator, and then I will provide detail for the record. Lacking the authority, we have not come forward with any particular formal written-down management process. However, management of similar authorities in other environmental statutes, has given us a clear direction for the future, and one might want to look at those statutes to see how we might well apply such authority under the Clean Water Act.

On the second point, yes, there are categories where the administrative penalties provision would be particularly appropriate. For example, the admission on the part of the discharger permittee, of an unintentional discharge. We would look at the administrative penalty provision as a quick method to bring that case to conclusion. I think it would be a very fair conclusion, saving both parties, the taxpayers and the dischargee, money in the process. We have no intention of disregarding our responsibilities to go before a Federal judge, when the case is appropriate and we would be asking for an increased penalty if we did so.

There is a very strict, and, I think, clear path of authority within EPA for discharge of these duties, and those the Administrator, and the Regional Administrator, and no one of lessor status in the EPA, would be given the authority to carry out the provision.

Senator MITCHELL. I want to emphasize, I am not trying to create another lawyer's WPA here. The lawyers in the audience, and I know there are some here, because every American audience of two or more persons has at least one lawyer. But I do think that this is a very substantial authority.

Mr. RAVAN. Yes, sir; it is.

Senator MITCHELL. To assess an inquiry penalty of up to $10,000 a day, and I want to be assured that it will be exercised within carefully delineated and circumscribed procedures in a way that achieves desired result without infringing on the rights of our citizens. What you are saying is really, it would be the Administrator and the regional administrators who would possess that authority?

Mr. RAVAN. Yes, sir; that is correct.

Senator MITCHELL. And you will give me in writing the areas of activity in which you deem it particularly necessary and appropriate and some guidance based upon, I gather, the operation of a similar authority in other statutes as to how it would operate, some form of management plan?

Mr. RAVAN. Yes, sir; I will do that.

Senator MITCHELL. Thank you very much, Mr. Ravan. You and your associates have been a very forthright and knowledgeable witness, making a persuasive case even when you don't have a good argument.

Anybody can make a good case when they have got a good argument. It takes real skill to do it with some of the arguments you possess. Thank you very much.

The hearing will be adjourned.

Mr. RAVAN. Thank you very much, sir. I appreciate that.

[Whereupon, at 12:20 p.m., the subcommittee was recessed to reconvene Wednesday, March 27, 1985, at 9:30 a.m.]

[Responses to additional questions and the bills, S. 53 and S. 652 follow:]

RESPONSES TO ADDITIONAL QUESTIONS

Senator Stafford

Question: The Administration bill provides for permits to implement and enforce sludge criteria for toxics. S.53 does not contain such a provision. Please explain why you think this provision is needed.

Answer: The Administration bill provides authority to implement and enforce sludge criteria through permits because the present legislation provides no permit mechanism to implement the guidelines of section 405(d) of the Clean Water Act. A permit of some type would give EPA and the States a mechanism to more closely control the management of sewage sludge. It would also provide a better way of informing the regulated community of their responsibilities to comply with the Section 405(d) guidelines. Further, a permit program would help define the authorities of EPA and the various State agencies involved and provide for Federal review of State-operated programs to ensure adequate coverage of all Federally-regulated use and disposal practices.

The Agency currently does not have the legal authority to impose sludge use and disposal criteria issued under section 405(d) of the Clean Water Act through NPDES permits. However, some ten States currently use their own authority to supplement EPA authority and include sludge criteria in NPDES permits they issue under delegated programs. Some of the other States control sludge use and disposal practices through other types of permits or less formal control mechanisms.

The Administration bill would authorize sludge criteria to be incorportated into NPDES permits, other Federal permits, or State permits issued under a program approved by the Administrator. This provision would provide EPA and the States with flexibility to control sludge through the most appropriate mechanism.

Senator Chafee

Question: How much have States and municipalities expended between 1972 and 1985 for wastewater treatment facilities?

Answer: The most accurate and revealing response should be in constant dollars to eliminate the inroads inflation has made on purchasing power. Between 1972 and 1983, State and local expenditures totaled roughly $23 billion in constant 1982 dollars.

Senator Chafee

Question: Have any states set-aside or used more than 4% of their allotment for I/A project funding?

Answer: Yes. Four states used more than the mandatory 4% set-aside for fiscal year 1983 apropriations, (DC - 7.5%, TN - 7.0%, CA - 4.7%, and SD 4.2%). Three states increased their set-aside for fiscal year 1984 funds due to be obligated by September 30, 1985, (FL - 7.5%, MN - 4.4% and NM - 4.5%). Seven states increased their set-aside for fiscal year 1985 funds due to be obligated by September 30, 1986, (AK - 7.5%, FL - 7.5%, MN - 4.5%, MT - 7.5%, ND - 5.7%, NV - 7.5% and TN - 7.5%).

States	4% Mandatory Set-aside	FY84 Set-aside	FY85 Set-aside
MN	1,799,000	1,964,702	2,023,380
MT	477,000		893,700
NM	477,000	530,640	
ND	477,000		676,580
NV	477,000		893,700
AK	585,000		1,098,150
FL	3,303,000	6,193.261	6,193,261
TN	1,422,000		2,665,275

Senator Chafee

Question: What additional classes and categories of discharges are candidates for general permits?

Answer: Classes or categories are selected for general permit issuance after consideration of the waste effluent characteristics, the effluent control technology, the requisite monitoring, and the number of individual point sources that would be covered by the general permit. Where a significantly large number of dischargers have similar discharge, technology and monitoring characteristics, then a general permit for that class or category can be developed.

The following classes or categories of discharge are candidates for general permits:

- Trout fish hatcheries
- Minor publicly owned treatment works (POTWs)
- Ballast water treatment facilities
- Water supply facilities
- Army water purification mobil units
- Placer mines
- Stripper oil wells

Senator Chafee

Question: What is the status of EPA's issuance of effluent guidelines?

Answer: The current status of our effort to promulgate the effluent guidelines as covered by the modified Consent Decree (October 26, 1982; August 2, 1983; January 6, 1984; July 5, 1984; and January 7, 1985) is as follows: regulations for 23 industrial categories have been promulgated; regulations for 5 other industrial categories have been proposed and remain to be promulgated; and regulations for a segment of three industrial category remain to be both proposed and promulgated. (See attached schedule.) Regulations for 10 other industrial categories covered by the Consent Decree have been excluded from the regulations under provisions in Paragraph 8 of the Consent Decree.

2/22/85

INDUSTRIAL TECHNOLOGY DIVISION
STATUS OF THE RULEMAKING SCHEDULES

° 23 PROJECTS ARE PROMULGATED:

	Proposal*	Promulgation*
Aluminum Forming	11/82	09/83
Battery Manufacturing	10/82	02/84
Coal Mining	12/80	09/82
Coil Coating (Phase I)	12/80	11/82
Coil Coating (Phase II)	01/83	11/83
Copper Forming	10/82	08/83
Electrical/Electronic Components (Phase I)	08/82	03/83
Electrical & Electronic Components (Phase II)	02/83	11/83
Inorganic Chemicals (Phase I)	07/80	06/82
Inorganic Chemicals (Phase II)	09/83	07/84
Iron & Steel Manuf.	12/80	05/82
Leather Tanning & Finishing	06/79	11/82
Metal Finishing	08/82	07/83
Nonferrous Metals (Phase I)	01/83	02/84
Ore Mining	05/82	11/82
Petroleum Refining	11/79	09/82
Pharmaceuticals	11/82	09/83
Plastics Molding & Forming	02/84	12/84
Porcelain Enameling	01/81	11/82
Pulp & Paper	12/80	10/82
Steam-Electric	10/80	11/82
Textile Mills	10/79	08/82
Timber	10/79	01/81

° 5 PROJECTS TO BE PROMULGATED:

	Proposal*	Promulgation*
Foundries	10/82	06/85 Σ
Nonferrous Metals Forming	02/84	06/85 Σ
Organic Chemicals and Plastics & Synthetic Fibers	02/83	03/86 Σ
Pesticides	11/82	08/85 Σ
Nonferrous Metals (Phase II)	05/84	07/85 Σ

---

* Date signed by the Administrator.

Σ Revised schedule approved by the Court (October 26, 1982; August 2, 1983; January 6, 1984; July 5, 1984; and January 7, 1985)

Senator Chafee

Question: When a variance application is filed, how does EPA currently address the applicable statutory deadline? Are there time limits for submittal and processing of a variance application? Are BAT, BCT, and secondary treatment effluent limitations in effect for enforcement purposes while a variance application is pending? If an up-to-date permit has not been issued, has a pending variance application prevented the permit from being issued? For §301(h), 301(g) and FDF variances, provide the average and maximum time (calendar) it has taken to issue a final decision. Provide the average and maximum personnel and contract resource costs associated with the processing of §301(h), 301(g) and FDF variances.

Answer: (The following response is for §§301(c), 301(g), 301(h) and FDF variances and §301(k) time extensions.):

The filing of a variance request does not impact the applicable statutory deadline for compliance with BPT, BAT, and BCT. However, there are at least three reasons for delays in compliance with permit conditions due to pending variance requests: (1) continuation of old permit, or discharge without a permit, during consideration of the variance request; (2) non-enforcement of permit conditions for the variance pollutants, during the pendency of the consideration of the variance request (the discharger would still be subject to citizens suits); (3) stay of permit conditions during the appeal of a decision on the variance request.

Time limits do exist for submittal of a variance application. In the case of §§301(c), 301(g) and 301(h), the time limitations are based upon the statute. The time limitations appear below.

Variance		Application Deadline
301(c) and 301(g)	Initial:	September 25, 1978, for pollutants controlled by BAT guidelines promulgated before December 27, 1977, otherwise 270 days after promulgation of the effluent limitations guideline. No initial request is necessary for variance requests from BPJ limits.
	Complete:	By the close of the comment period on the draft permit. (Extension of up to six months allowed.)
301(k)		By the close of the comment period on the draft permit.

FDF (Direct)	By the close of the comment period on the draft permit.
FDF (Indirect)	180 days after effective date of the categorical standard or 30 days after final decision on a categorical determination.
301(h)	December 29, 1982

There are no statutory or regulatory time limits for the processing of variance applications.

Generally, the effluent limitations in the current effective or expired NPDES permit are the limitations that are in effect for enforcement purposes while a variance application is pending. For most industrial dischargers, the current permit only contains BPT limitations or was based upon BPJ. Because the variance request may involve levels of treatment required for the most significant (or one of the most significant) outfalls at an industrial facility, it is common practice to delay permit issuance until variance requests are acted upon. However, the States and Regions do have the authority to issue NPDES permits containing the BAT, BCT and/or secondary limitations during the pendency of the variance request. Some States, as a matter of course, issue the permits containing the guidelines limitations, with alternative limitations that will be effective upon approval by EPA of the pending variance request. (In such cases, enforcement of the guidelines limits would not generally be considered appropriate unless and until the variance is finally denied by EPA.) EPA has taken a similar approach in one recent case. In that case, the agency separated the processing of a FDF and 301(g) variance request from the permit and issued a permit with guidelines limitations during the pendency of the variance review.

Section 301(j)(2) does provide for a stay of BAT effluent limitations during the pendency of §301(g) variance applications, so permits could be issued for all other BAT requirements. However, 301(j)(2) establishes a very difficult test, and findings that must be satisfied before a stay of the BAT requirements may be granted.

A pending variance application has often prevented a new permit containing BAT, BCT and/or secondary effluent limitations from being issued. If a new permit were issued when the request was pending, it must contain BAT, BCT and/or secondary limitations including those for which a variance is pending.

Oftentimes, the issues involved in a variance request are closely connected with other permit issues, including State certification, thereby effectively preventing issuance of a permit until final resolution of all issues relating to the variance request.

In the 1970's, EPA generally issued final decisions on many of the FDFs for direct discharger variance requests within one year after their receipt. Currently, the time to issue final decisions has increased. In FY84, final decisions were issued on two Alaska pulp and paper mills (submitted in 1980) and final resolution of two California power plant variances that had been pending since the late 1970's. Of the 56 FDF variance requests for direct dischargers submitted to Headquarters, there have been four approvals, 14 denials, 17 withdrawn and 23 pending variances (FDF variance requests are forwarded to EPA Headquarters only if NPDES States and EPA Regional Offices do not deny them or recommend approval of them). The date of submission to EPA of the 23 FDF pending variances at Headquarters appears below.

Submission to EPA	Number of Variances
Before 1977	2
1977 - 1978	7
1979 - 1980	4
1981 - 1982	4
1983 - 1984	6
Total	23

In addition, there are currently approximately 40 FDF variance requests from indirect dischargers pending in the EPA Regional Offices. Decisions on many of these requests was delayed until the U.S. Supreme Court issued its decision on the availability of FDF variances for toxic pollutants from pretreatment standards. This decision was issued on February 27, 1985. EPA will shortly ask that these variance applicants indicate whether they wish to pursue their original requests.

EPA is beginning to receive and process the final applications for 301(g) variance requests. At this time, there are approximately 90 applications (60 at the State level and 30 at the Regional level). It is expected that the average time for EPA to issue final decisions on these 301(g) requests will be approximately 1/2 to one year, with a maximum of 1 1/2 to two years. EPA could, however, receive a very large number of additional requests upon promulgation of the BAT guideline for the pesticides industry. Processing time could significantly increase in this event.

EPA has received 207 applications for 301(h) variances. At this time, there have been nine approvals, 39 denials, 31 withdrawn and 128 are pending (including 54 tentative decisions). It is estimated that the average time for EPA to issue a final decision on a 301(h) request ranges from one to five years, depending on the size and complexity of the application.

For FDF variances, EPA estimates that it requires an average of 130 workdays (0.50 FTE) for issuance of a final decision; this time is necessary to appropriately evaluate the request due to the fact that all FDF decisions can establish national precedent since interpretations of national guidelines are at issue. Use of contract funds can reduce this figure for an average variance. Some FDFs are very complex and/or controversial and cost much more to process. For example, EPA estimates that over 3.0 FTE workyears were expended for issuance of the final decisions denying the two Alaska pulp mill FDF requests. EPA also expended $228,000 of contract funds on the Alaska pulp mill FDF requests. One of these requests is still in administrative litigation.

For each 301(g) variance, EPA estimates the following use of personnel resources and contract funds.

	Average	Maximum
Personnel	0.75 FTE	3.5 FTE
Contract	$20,000	$50,000

For each 301(h) variance, EPA estimates the following use of personnel resources and contract funds.

	Average	Maximum
Personnel	1.0 FTE	3.0 FTE
Contract	$50,000	$100,000

Senator Chafee

Question: List those industrial categories which potentially might warrant preparation of additional effluent guidelines.

Answer: Below are listed the industrial categories that may warrant additional effluent guidelines. The industrial categories are listed in priority order for further study to characterize problems in more detail and to determine the need for national regulations.

Ranking of Industrial Categories:

The following three categories are believed to be major sources of hazardous or toxic pollutants, based on preliminary information. Major studies are needed to fully characterize their waste discharges, to evaluate control technologies, and to develop national regulations as needed.

Hazardous Waste Treatment Facilities
- Waste Oil Reclaimers

Solvent Reclaimers
- Barrel Reclaimers
- Central Waste Treatment Facilities

Transportation Sources
- Washout Facilities (Barge Washing, Truck and Rail Transport)

Pursuant to work on the following categories, EPA believes there to be significant potential problems with toxic pollutants deserving additional study. In some cases, EPA already has information gathering efforts underway to update existing regulations or to assess toxic pollutants in additional segments of previously regulated industries. These industries include:

Ferroalloy Manufacturing

Metal Finishing (Phase II)
- Galvanizing
- Non-plater Metal Processing Plants
- Machine Building and Rebuilding

On Shore "Stripper" Oil and Gas Wells

Coastal Oil/Gas Drilling Platforms (near-shore)

Organic Chemicals Formulators and Packagers

Pesticide, Pharmaceutical, and Organic Chemical Research Facilities

Senator Humphrey

Question: This Committee has, in the past, encouraged States to assume National Pollutant Discharge Elimination System permitting authority, and a considerable number of States have assumed this authority. It is my understanding, however, that several States have had difficulties in obtaining EPA approval for the delegation of this authority. Could you please explain why States such as New Hampshire have been subjected to frustration and seemingly endless paperwork in acquiring this authority?

Answer: The basic requirements for a State NPDES program are established by sections 402(b) and 304(i) of the CWA. The Act authorizes EPA to approve a State's request for authority to administer the NPDES permit program if the Administrator determines the State has adequate authority and resources to administer and enforce a program which meets the minimum criteria in the CWA and EPA regulations developed under the Act. The CWA requires States to submit a number of documents as part of its request for program approval, including a full and complete description of its proposed program and a statement from the State's attorney general certifying that the State has adequate legal authority to carry out the program.

The amount of work required of a State to develop an adequate program naturally will vary, depending upon the number of changes the State must make to existing legal authorities and the adequacy of the State's initial program drafting. To avoid unnecessary effort, EPA generally works closely with a State in the initial stages of program development to ensure that the State's program meets EPA's minimum criteria.

EPA is not aware of any instances where States have had difficulty in obtaining program approval where the State's program submission met all minimum criteria of the CWA. In a few instances, State program approval has been delayed by concerns over inadequate legal authority or other elements of a program submission. However, EPA and these States have worked together successfully to revise the State programs so as to meet the minimum criteria of the CWA.

The State of New Hampshire has not requested program approval as of this date. The State originally expressed interest several years ago in obtaining approval of its NPDES program. At that time, EPA conducted an initial evaluation of the State's legal authorities and provided the State with comments.

Since that time, EPA and State officials and staff have been discussing the requirements for program approval and EPA has been providing the State Water Supply and Pollution Control Commission with models to assist the development of an adequate program. EPA will continue to work closely with the State to prepare a submission that meets the requirements of the Act.

Senator Humphrey

Question:

To what extent has EPA been encouraging local governments in the course of the permitting process, to anticipate the possibility of legislative changes which would affect the level of federal commitment to the construction grants program?

Answer:

The EPA, during the permit compliance process, has not been encouraging permittees to anticipate the availability of any future construction grants funds. The basis of EPA's January 1984 National Municipal Policy is that, in all cases, the municipality is responsible for compliance with permit limits. Under this Policy, all municipal permit holders in violation of permit effluent limits are being required to submit a Municipal Compliance Plan. This Plan must detail how the municipality will achieve compliance with the permit before July 1, 1988, regardless of the availability of Federal grant monies. The muncipality has the option of using Federal grant assistance if it will be available to meet this deadline. If not, then the municipality must proceed with facility construction using its own funding sources. In exceptional circumstances, EPA will consent to a compliance date past July 1, 1988, such as when a municipality is financially or physically unable to meet the compliance deadline. Under the Policy, such a schedule would be embodied in a judicial consent decree. However, the absence of federal grant assistance alone does not qualify as an exceptional circumstance for the purposes of extending a compliance schedule past the compliance deadline. Guidance and assistance on financial planning and treatment options is being made available to municipalities.

Senator Humphrey

Question: Section 119 of S.53 permits the Town of Hampton, New Hampshire to continue to use its ad valorem tax user charge system for collecting the cost for the operation and maintenance of its sewer treatment works. In 1977, Congress sought to provide greater flexibility to communities by allowing them to use ad valorem taxes to pay the costs of operation and maintenance. A technicality led to the problem which Hampton is now facing, and it is my understanding that at least one other community in my State may be encountering a similar problem. What administrative action can be taken to eliminate this "catch-22?"

Answer: In order for the Town of Hampton or any other New Hampshire community in the same circumstances to collect its user charges through an ad valorem tax system, the Clean Water Act must be amended to specifically allow such procedures. When the town of Hampton received its construction grant, P.L. 92-500 did not allow the use of an ad valorem tax system for the collection of user charges. The adoption of P.L. 95-217 allowed the use of ad valorem systems, but it restricted the systems' use to grantees without approved actual use systems. Therefore, the Town of Hampton must comply with the conditions of its P.L. 92-500 grant to implement its approved user charge system for funding the O,M&R costs of wastewater treatment.

Senator Humphrey

Question: Based on the Agency's experience and analysis, what is your assessment of the ability of local governments to finance wastewater treatment needs so that they will be in compliance with the goals of the Act, particularly in relation to other infrastructure priorities?

Answer: Most communities which carefully select and build the most appropriate, simple technologies with low operation and maintenance costs should be able to meet the requirements of the Clean Water Act even with little or no outside financing assistance. The ability of small communities may be more in question especially if these communities require new collection system. Particularly communities under 3,500 in population can expect to see their present "medium to strong" financial condition affected. This cost pressure can be mitigated by greater emphasis on alternative technologies including cluster systems, lagoons, sand filters, and some types of land treatment.

Where there is a financial capability problem, the Agency suggests two main approaches. The first approach would involve requiring affordable increases in user charge fees now so that an adequate capital base can be generated for construction in the near future. The second approach would be to require a staged construction project where the municipality constructs a useable portion of a treatment system which they can afford now and completes additional components as financing becomes feasible.

Dedicated user fees provide the principal source of revenue for funding local operations, maintenance and capital expenditures. We have not analyzed the affect of these fees on the funding of other local infrastructure requirements.

Senator Symms:

Question: What studies has EPA conducted, or would it suggest, on the accelerated eutrophication problem at Lake Pend Oreille, Idaho?

Answer: The Lake Pend Oreille/Clark Fork drainage system extends into parts of Idaho, Montana, Washington and Canada. The potential for increased eutrophication in this system is a recognized concern in the area. Also the potential for interstate transport of pollutants is a highly visible issue to the local governments in the surrounding areas.

EPA Regions 8 and 10 are represented on a Task Force, which the Governor of Montana has created to conduct studies on the lake using private funding sources. University studies of organism tolerances to various pollutants are being conducted through this Task Force. The States of Idaho and Montana are also conducting limited field water quality studies using §205(j) funds.

Although the current studies can form the basis for additional work, they will not investigate all aspects of the problem. Additional activities that might be undertaken to investigate and correct pollution problems on this lake include:

- Investigate inputs from point sources
- Quantify inputs of toxic metals and other pollutants of concern
- Identify nonpoint source runoff problems from upstream agriculture and silviculture activities
- Characterize the eutrophic state of the lake
- Establish total maximum daily loads (TMDLs) for pollutants of concern to prevent further eutrophication
- Establish management plans for upstream nonpoint sources.

Interstate cooperation on a long term approach will be essential to prevent or reverse eutrophication of the Lake Pend Oreille system.

Senator Bentsen

Question: List those classes and categories of discharges, with the number of sources covered, for which general permits have been proposed or promulgated by EPA?

Answer: General permits have been proposed or promulgated by EPA for the following classes or categories:

		Approximate Sources Covered	
		Currently Proposed	Final Effective Permits
1.	Coal mines	--	2,300
2.	Oil & gas	4,000	3,450
3.	Animal feedlots	--	416
4.	Non-contact cooling water	--	200
5.	Construction activities	50	200
6.	Uncontaminated storm water	1,000	200
7.	Deep seabed mining	--	4
8.	Hydrostatic testing	--	3,000
9.	Navy weapons training	--	200
10.	Petroleum storage and transfer	--	500
11.	Seafood processors	--	75

Senator Mitchell

Question: Please provide an assessment of H.R. 8's turn-key provision.

Answer: Under the proposed legislation on "turn-key" construction in H.R. 8, projects costing $8 million or less could be designed and constructed on a simultaneous basis without prior approval of plans and specifications. Currently, prior approval is required under the Clean Water Act. This "turn-key" contractual arrangement requires a high degree of management and technical capability on the part of the municipality because the checks and balances provided by separate engineering and construction contracts are lost when both services are provided under a "turn key" contract.

Senator Mitchell

Question:	What technical advice would EPA have on improving coordination of the Act's clean lakes and nonpoint source pollution control programs?
Answer:	As a starting point, there should be an updated, current ranking of all lakes needing control in a given State to set priorities for implementation in current and future years. Where appropriate, existing lake classification studies could be used, supplemented as needed with new evaluations to assure coverage of all important public lakes in the State.

Next, before implementing a restoration program for any specific lake, there should be a well-designed, State-certified implementation plan which provides control for all contributing point and nonpoint sources at levels adequate to maintain desired water quality, coupled with in-lake restoration, if any, initially needed to achieve that water quality. There must be adequate assurances that point and nonpoint source controls are being implemented and will be maintained before proceeding with in-lake restoration (otherwise, inlake restoration will be short-lived).

Given the nature of NPS, it is also important that other relevant Federal, State and local programs be integrated into the lake restoration and protection program. For example, various USDA programs providing technical and cost-share assistance to farmers should be utilized in the lake watershed to assure application of BMP's needed to protect the lake. Mechanisms need to be in place to assure consistency among such Federal, State and local programs in the watershed.

Finally, NPS programs need to address waterbodies other than lakes. Thus, there should not be a separate NPS program for lakes, but rather a clean lakes program which utilizes and complements the States overall nonpoint source control program.

Senator Mitchell

Question: How would EPA propose to manage its administrative civil penalty provision, if enacted?

Answer: EPA would manage its civil penalty provision by integrating that enforcement tool into its overall enforcement program. Selection of administrative enforcement would depend on the type of case involved. The kinds of cases for which administrative penalties might be sought are described in the answer to a later question. EPA has extensive experience with administrative civil penalty litigation under such statutes as the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Administrative penalty proceedings under those acts and others are governed by the Agency's Consolidated Rules of Practice, 40 C.F.R. Part 22. Those Consolidated Rules provide for formal penalty hearings on the record with a right of court appeal.

In drafting the administrative penalty provision in the Administration bill, however, EPA concluded that formal penalty hearings would be unnecessarily expensive and time consuming for *all* parties for many of the violations involved. Our proposal, therefore, permits EPA to simplify and streamline penalty procedures while preserving the central rights accorded by the Consolidated Rules. For example, under the bill, an administrative penalty can be assessed only after (1) prior written notice of the proposed penalty, (2) right to a hearing, at which there must be an opportunity to be heard and to present evidence, and (3) completion of the hearing which will form the basis for the order "made on the administrative record." The Agency's penalty assessment may be appealed to an appropriate United States district court where there would be review of the administrative record. The Agency's penalty order would be set aside if there were not substantial evidence to support the finding of a violation or if the penalty assessment constituted an abuse of discretion.

The administrative penalty system proposed by the bill should provide ample procedural safeguards for litigants, particularly since the kinds of administrative cases envisioned are not expected to be factually complex. In fact, many of the administrative penalty actions would be based on simple discharge monitoring reports prepared and submitted to the Agency by the permittees themselves.

The Agency would develop and issue procedural regulations for use of administrative penalty authority. The regulations would be designed to maximize the efficient use of enforcement resources and minimize costs for all concerned, while still ensuring fundamental fairness. National consistency would also be achieved through establishment of a policy for developing administrative penalty amounts, such as the policy which is now under development for civil referrals to address Clean Water Act violations. The Agency believes that the above procedures amply protect the rights of permittees against whom administrative penalties might be proposed. An appropriate mix of judicial enforcement, administrative orders and administrative penalty actions should achieve greater compliance with the Clean Water Act.

Senator Mitchell

Question:	List any specific types of violations for which administrative assessment of civil penalties might be more appropriate than judicial assessment.
Answer:	A feature of the Clean Water Act is that it requires regular filings of discharge monitoring reports and other reports by permittees with the Agency. It is anticipated that many administrative penalty actions would be based on data prepared by permittees as submitted in self-monitoring reports. Accordingly, the facts in the administrative penalty actions would often be undisputed.

Situations where injunctive relief with court oversight is not considered necessary to achieve further compliance, would be particularly appropriate for use of administrative penalties. Similarly, use of administrative penalties might be employed to obtain compliance from permittees refusing to comply with Section 308 data requests or refusing to submit pretreatment plans or other periodic reports required by the Clean Water Act. Failure to comply with new program requirements, such as those involving sludge, might properly be addressed initially by an administrative penalty action if violations are clearly identifiable and straightforward. Another example of an appropriate administrative penalty proceeding would be a "penalty only" action where compliance has been achieved but the violator has obtained an economic benefit from non-compliance. A major reason for administrative penalties is to deprive a violator of any economic advantage from non-compliance, where such non-compliance is not continuing so as to require court-ordered injunctive relief.

Administrative penalty actions would be considered when a remedy stronger than an administrative order is deemed necessary to obtain compliance. However, administrative penalty actions would not be instituted when court injunctive relief or specific performance is believed to be necessary to stop ongoing conduct which violates the Clean Water Act.

Question: Who in EPA would have the authority to assess administrative civil penalties?

Answer: We expect that the assessing official would be the Administrator or Regional Administrator, although there would also be a neutral hearing officer who would be involved in hearing evidence, making a recommendation, and making a tentative assessment subject to review by the Administrator or the Regional Administrator. Of course, the assessment by the hearing officer would become final if there were no appeal of the assessment to the Administrator or to the Regional Administrator. The precise framework would be established by regulation once the penalty authority is enacted into law. There would also be a right of further appeal to the U.S. District Court.

Question: (Mr. Baucus)

Please state the agency's policy regarding risk rates and their consideration in the development of Recommended Maximum Contaminant Levels and Maximum Contaminant Levels.

Response:

In general, we set RMCL's to prevent known or anticipated adverse effects with an adequate margin of safety, in accord with the statute. We set MCL's as close to RMCL's as is feasible.

EPA does not have a policy on what an acceptable risk rate should be. Risk management must routinely be done on a case-by-case basis. Each case will have features that are distinct and require individualized attention. For example, the estimated risk of exposure to trihalomethanes (THM's) permitted under drinking water standards is greater than the health risks posed by most of the other substances regulated under interim standards. This is because there is an off-setting risk of disease associated with limiting the use of chlorine disinfectants. It would be possible to reduce THM's further, for example, by limiting use of chlorine, however the risk of microbiological contamination rises with each increment of reduction in disinfectant level. The eventual risk permitted is a function of the competing resultant risks, the ability to reduce risk, the affordability of unit risk reductions and related matters which may ease or limit risk reduction.

Question: (Mr. Baucus)

In your view do maximum contaminant levels serve as suitable standards for determining cleanup decisions under Superfund and RCRA? In your view is it appropriate to apply them this way?

The Superfund Amendments of 1985, if enacted, would rely on the Safe Drinking Wate Act for its health-based standards. The EPA has, to date issued standards for very few contaminants. What effort are you prepared to make to promulgate more standards so that parties cleaning up Superfund sites will have a more specific drinking water goal to attain?

Response:

The Interim Maximum Contaminant Levels are set to protect public healthto the extent feasible. The Revised Maximum Contaminant Levels will be set as close to the RMCL's as feasible. EPA believes these standards will adequately protect public health from contaminants in drinking water.

RCRA and CERCLA require EPA to establish hazardous waste regulations and take remedial action as necessary to protect public health and the environment. The RCRA regulations require EPA to specify concentration limits in ground water which may be on MCL, an alternate concentration limit, or the background level. (40 CFR §264.94)

When making Superfund decisions, EPA has considered MCL's in determining what level of clean-up is necessary to protect public health and the environment. EPA has also proposed amendments to the National Contingency Plan which would generally require selection of a remedy which attains or exceeds applicable or relevant Federal public health or environmental standards. MCL's are explicitly mentioned as one such standard. (50 FR 5862, February 12, 1985). However, under the proposal, EPA would not be required to meet applicable or relevant federal standards where attainment of the standard is technologically impractical, would cause unacceptable environmental impacts, involves an interim remedy, or where selection of a lesser remedy is dictated by considerations of fund balancing or an enforcement action under CERCLA §106.

A second issue is whether there will be a sufficient number of drinking water standards to ensure adequate protection of public health during CERCLA remediation. The current agenda within EPA consists of four phases of drinking water regulations.

Phase I considers nine frequently found solvents. Phase II will readdress the interim standard for inorganic contaminants, microbiological contaminants and pesticides. Phase II will also consider a number of additional synthetic organic compounds (SOC's), predominantly pesticides and solvents. Phase III will deal with radiological contaminants, again a rare CERCLA problem. Phase IV will reconsider disinfection by-products. Still other contaminants may be considered in yet latter regulatory initiatives (Phase V and beyond).

We therefore believe that there will be drinking water standards to respond to the needs of these programs where they are are applicable and relevant.

Chloroform, the predominant THM, is a substance regulated as a potential carcinogen. Chloroform is produced during chlorination that is essential to protect against waterborne disease, which is a high risk in the absence of adequate treatment. The interim standard of 1979 was 0.10 mg/l. Using one of the more conservative models, a lifetime risk of about 1 in 10,000 was calculated at the time.

The radium interim regulation also involved a nominal incremental lifetime risk calculated at about one in 10,000. In that case it was projected to a risk reduction of about four cases per year in the U.S. The risk calculations were not the basis for either of these interim standards (chloroform and radium).

With regard to RMCL's, none have yet been set. Our Phase I regulatory package is under receive at this time. For those chemicals which pose a known or probable risk of cancer, EPA proposes any RMCL level of zero in the NPRM for Phase I.

II

99TH CONGRESS
1ST SESSION

S. 53

To amend the Clean Water Act, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 3, 1985

Mr. STAFFORD introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To amend the Clean Water Act, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Clean Water Act Amendments of 1985".

TITLE I—REGULATORY AMENDMENTS

AUTHORIZATION

SEC. 101. (a) Section 104(u)(1) of the Clean Water Act is amended by inserting immediately following "1982" the phrase ", and not to exceed $22,770,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, September 30, 1988, and September 30, 1989".

(b) Section 104(u)(2) of the Clean Water Act is amended by inserting immediately following "1982" the phrase ", and not to exceed $3,000,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, September 30, 1988, and September 30, 1989".

(c) Section 104(u)(3) of the Clean Water Act is amended by striking "and" after "1981," and by inserting immediately following "1982" the phrase ", and not to exceed $1,500,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, September 30, 1988, and September 30, 1989".

(d) Section 106(a)(2) of the Clean Water Act is amended by striking "and" after "1981" and inserting in lieu thereof a comma and by inserting ", 1986, 1987, 1988, and 1989" immediately following "1982".

(e) Section 112(c) of the Clean Water Act is amended by striking "and" after "1981," and inserting immediately following "1982" the phrase ", and $7,000,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, September 30, 1988, and September 30, 1989".

(f) Section 314(c)(2) of the Clean Water Act is amended by striking "and" after "1981," and inserting immediately following "1982" the phrase ", and $30,000,000 per fiscal year for fiscal years 1986, 1987, 1988, and 1989".

(g) Section 517 of the Clean Water Act is amended by striking "and" after "1981," and inserting immediately following "1982" the phrase ", and $160,000,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, September 30, 1988, and September 30, 1989".

CHESAPEAKE AND NARRAGANSETT BAYS

SEC. 102. Title I of the Clean Water Act is amended by adding at the end thereof the following new section:

"CHESAPEAKE AND NARRAGANSETT BAYS

"SEC. 117. (a) The Administrator shall continue the Chesapeake Bay Program and shall establish and maintain in the Environmental Protection Agency an Office, Division, or Branch of Chesapeake Bay Programs to—

"(1) collect and make available, through publications and other appropriate means, the results of and other information pertaining to research and other activities that address the environmental quality of the Chesapeake Bay (hereinafter 'the Bay');

"(2) coordinate all Federal research projects pertaining to the Bay;

"(3) conduct research to determine the impact of sediment deposition in the Bay and to identify the sources, rates, routes, and distribution patterns of such sediment deposition; and

"(4) conduct research on the impact of natural and man-induced environmental changes on the living resources of the Bay and the relationships between such changes. Particular emphasis shall be placed on researching the impact of pollutant loadings of nutrients, chlorine, acid precipitation, dissolved oxygen, and toxic pollutants, including organic chemicals and heavy metals. Special attention shall be given to the impact of such changes on the striped bass.

"(b)(1) The Administrator shall, at the request of the Governor of a State affected by the interstate management plan developed pursuant to the Chesapeake Bay Program (hereinafter 'the plan'), make a grant for the purpose of implementing the management mechanisms contained in the plan if such State has, within one year after the date of enactment of the Clean Water Act Amendments of 1985, approved and committed to implement all or substantially all aspects of the plan. Payments for such purpose may be made to the States as hereinafter provided, subject to such terms and conditions as the Administrator considers appropriate.

"(2) A State or combination of States may elect to avail itself of the benefits of this subsection by submitting to the Administrator a comprehensive proposal to implement management mechanisms contained in the plan which shall include (A) a description of proposed abatement actions which the State commits to take within a specified time period to reduce pollution in the Bay and to meet applicable water quality standards, and (B) the estimated cost of the abatement actions proposed to be taken during the next fiscal year. If the Administrator finds that such proposal is consistent with the national policies set forth in section 101(a) of this Act and will contribute to the achievement of the national goals set forth in section 101(a) of this Act he shall approve such proposal and shall finance the costs of implementing segments of such proposal; except that Federal grants under this subsection shall not exceed 55 per centum of the costs of implementing the plan in any fiscal year and shall be made on condition that non-Federal sources provide the remainder of the cost of implementing the plan during such fiscal year.

"(3) Administrative costs in the form of salaries, overhead or indirect costs for services provided and charged against programs or projects supported by funds made available under this subsection shall not exceed in any one fiscal year 10 per centum of the annual Federal grant made to a State under this subsection.

"(c) Any State or combination of States that receives a grant under subsection (b) shall, within eighteen months after the date of receipt of a Federal grant under subsection (b) and biennially thereafter, report in conjunction with EPA to the Congress on progress made in implementing the interstate management plan developed pursuant to the Chesapeake Bay Program.

"(d)(1) The Administrator shall, at the request of the Governor of an affected State, after consultation with appropriate Federal and State agencies and other interested persons, make a grant for purposes of assessing the principal factors having an adverse effect on the environmental quality of the Narragansett Bay, as perceived by both scientists and users, in conjunction with developing and implementing a management program to improve such Bay's water quality. Payments for such purposes may be made to the States as hereinafter provided, subject to such terms and conditions as the Administrator considers appropriate.

"(2) A State may elect to avail itself of the benefits of this subsection by submitting to the Administrator a full and complete description of the program it proposes to establish and administer under State law. The Administrator shall approve each such submitted program, within three months of receipt of such program, if the applicant demonstrates to the satisfaction of the Administrator that the applicant will—

"(A) establish a committee of representatives from various units of Federal, State, and local governments, research and educational institutions, and concerned groups and individuals on the Narragansett Bay, to provide advice on the design and implementation of a management program and to coordinate communication on issues affecting the Narragansett Bay's water quality;

"(B) coordinate, subsequent to a review of presently ongoing research, research and abatement programs that will most efficiently address those principal factors having an adverse effect on the Narragansett Bay's water quality; and

"(C) undertake, subsequent to an analysis of all environmental sampling data being collected on the Narragansett Bay, methods for improving such data collection, particularly with respect to toxic pollutants; establish a continuing capacity for collecting, storing, analyzing and disseminating such data; institute a sampling program where deficiencies are found to exist in present sampling programs; and develop and, as soon as practicable but within three years after enactment of the Clean Water Act Amendments of 1985, implement management practices and measures (including land use requirements) to reduce to the greatest extent feasible pollutant loadings in such Bay and to improve such Bay's water quality.

"(3) If the Administrator approves a program submitted under paragraph (2) of this subsection, he shall finance the costs of implementing segments of such program, except that

Federal grants under this subsection shall not exceed 55 per centum of the costs of implementing the program in any fiscal year and shall be made on condition that non-Federal sources provide the remainder of the cost of implementing the plan during such fiscal year.

"(4) Any State that avails itself of the benefits of this subsection shall, not later than two years after issuance of a Federal grant under this subsection and annually thereafter, report to the Administrator on progress made in implementing a management program to improve the water quality of Narragansett Bay.

"(e) There are hereby authorized to be appropriated the following sums, to remain available until expended, to carry out the purposes of this section:

"(1) $3,000,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, and September 30, 1988, to carry out subsection (a);

"(2) $10,000,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, and September 30, 1988, to carry out subsection (b); and

"(3) $1,500,000 per fiscal year for the fiscal years ending September 30, 1986, September 30, 1987, and September 30, 1988, to carry out subsection (d).".

SMALL FLOWS CLEARINGHOUSE

SEC. 103. Section 104(q) of the Clean Water Act is amended by adding the following new paragraph:

"(4) Notwithstanding section 205(d) of this Act, from funds that are set aside by States under section 205(i) of this Act and not obligated by the end of the twenty-four month period provided under section 205(d), the Administrator shall award a grant under this section in the amount of $1,000,000 or such unobligated amount, whichever is less, in each year, to support a National Clearinghouse to collect and disseminate information on small flows and innovative or alternative technologies, consistent with paragraph (3).".

COMPLIANCE DATES

SEC. 104. (a) Section 301(b)(2)(C) of the Clean Water Act is amended by striking "not later than July 1, 1984," and inserting immediately after "of this paragraph" the following: "as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), or three years after July 1, 1983, whichever is later, but in no case later than July 1, 1987".

(b) Section 301(b)(2)(E) of the Clean Water Act is amended by striking "not later than July 1, 1984," and inserting in lieu thereof "as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), or three years after

July 1, 1983, whichever is later, but in no case later than July 1, 1987, compliance with".

(c) Section 301(b)(2)(F) of the Clean Water Act is amended by inserting "as expeditiously as practicable but in no case" and striking "not" after "subparagraph (A) of this paragraph" and by striking "July 1, 1984" and inserting in lieu thereof "three years after July 1, 1983".

(d) Section 301(b) of the Clean Water Act is amended by adding the following new paragraph:

"(3)(A) for effluent limitations under paragraph (1)(A)(i) of this subsection promulgated after January 1, 1982, and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for such industrial category issued before such date, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), or three years after July 1, 1983, whichever is later, but in no case later than July 1, 1987; and

"(B) for any effluent limitation in accordance with paragraph (1)(A)(i), (2)(A)(i), or (2)(E) of this subsection established only on the basis of section 402(a)(1) in a permit issued after enactment of the Clean Water Act Amendments of 1985, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are established, and in no case later than July 1, 1987.".

OCEAN WAIVER

SEC. 105. (a) Section 301(h)(5) of the Clean Water Act is amended to read as follows:

"(5) sources introducing waste into such treatment works are in compliance with all applicable pretreatment requirements and the applicant has assured continued compliance with such requirements and, in the case of any treatment works serving a population of five thousand or more, the applicant has adopted and is enforcing a program to control the entrance of toxic pollutants from industrial sources into such treatment works, comparable to that required by section 402(b)(8);".

(b) Section 301(h) of the Clean Water Act is amended by—

(1) in paragraph (7), striking the period immediately after "the permit" and inserting in lieu thereof a semicolon.

(2) adding immediately after paragraph (7) the following new paragraph:

"(8) the applicant at the time such modification becomes effective will be discharging effluent which has received at least primary or equivalent treatment. For the purposes of this paragraph, "primary or equivalent treatment" means treatment by screening, sedimentation, and skimming adequate to remove at least 30 per centum of the biological oxygen demanding material and of the suspended solids in the treatment works influent, and disinfection, where appropriate.";

(3) in that portion of subsection (h) following new paragraph (8) as added by this Act,

(A) adding immediately after the first sentence thereof the following new sentence: "Such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works."; and

(B) adding at the end thereof the following: "No permit issued under this subsection shall authorize the discharge of any pollutant into saline estuarine waters which at the time of application do not support a balanced indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish, fish and wildlife or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of a causal relationship between such characteristics and the applicant's current or proposed discharge.".

(c) Section 301(j)(1)(A) of the Clean Water Act is amended by inserting before the semicolon the following: ", except that a publicly owned treatment works which prior to December 31, 1982, had a contractural arrangement to use a portion of the capacity of an ocean outfall operated by another publicly owned treatment works which has applied for or received a modification under subsection (h) of this section, may apply for a modification of subsection (h) in its own right not later than thirty days after the enactment of the Clean Water Act Amendments of 1985".

WATER QUALITY-BASED EFFLUENT LIMITATIONS AFTER BAT ATTAINMENT

SEC. 106. (a) Section 305 of the Clean Water Act is amended by adding the following new subsection:

"(c) Each State shall prepare and submit to the Administrator and the Congress within two years after the enactment of the Clean Water Act Amendments of 1985, and revise biennially thereafter, an identification of—

"(1) those waters within or adjacent to such State which after the application of effluent limitations required under section 301(b)(2) of this Act cannot reasonably be anticipated to attain or maintain (A) water quality standards for such waters reviewed, revised or adopted in accordance with section 303(c)(2)(B) of this Act, due to toxic pollutants, or (B) that water quality which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water; and

"(2) those waters within or adjacent to such State which are public water supplies or otherwise important to public health protection, or which have a high quality use designation, and which because of such use and current or potential pollution are of high priority to such State.

In the case of any State which fails to submit the identification required by paragraph (1), or which submits an incomplete identification, the Administrator shall promptly prepare an identification in accordance with paragraph (1).".

(b) Section 304(a) of the Clean Water Act is amended by adding the following new paragraphs:

"(7) The Administrator, after consultation with appropriate State agencies and on the basis of criteria and information published under paragraphs (1) and (2) of this subsection, shall develop and publish, within nine months after the date of enactment of the Clean Water Act Amendments of 1985, guidance to the States on performing the identification required by section 305(c)(1) of this Act.

"(8) The Administrator, after consultation with appropriate State agencies and within two years after the date of enactment of the Clean Water Act Amendments of 1985, shall develop and publish information on methods for establishing and measuring water quality criteria for toxic pollutants on other bases than pollutant-by-pollutant criteria, including biological monitoring and assessment methods.".

(c) Section 303(c)(2) of the Clean Water Act is amended by inserting "(A)" after "(2)" and by adding the following new subparagraph:

"(B) Whenever a State reviews water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria for all toxic pollutants listed pursuant to section 307(a)(1) of this Act, the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria shall be specific numerical criteria for such toxic pollutants and in addition may include criteria based on biological monitoring or assessment methods consistent with information published pursuant to section 304(a)(8). Particular attention shall be given to toxic pollutants which are highly persistent in the environment, bioaccumulative, or known or suspected carcinogens, mutagens, or teratogens. Nothing in this section shall be construed to limit or delay the use of effluent limitations or other permit conditions based on or involving biological monitoring or assessment methods.".

(d) Section 303(d) of the Clean Water Act is amended by adding the following new paragraph:

"(4) Not later than two years after the submittal of the identification required by section 305(c)(1) of this Act, each State shall establish effluent limitations for point sources discharging into each portion of the navigable waters identified under section 305(c)(1)(A) as necessary to attain applicable water quality standards, taking into account any substantial nonpoint source contributions of toxic pollutants and existing or planned controls on all sources. Such effluent limitations shall be incorporated into permits under section 402 of this Act, which shall provide for compliance as expeditiously as practicable, but in no event later than three years after the establishment of such effluent limitation.".

(e)(1) Section 302(a) of the Clean Water Act is amended by (1) inserting after "in the judgment of the Administrator" the phrase ", or as identified under section 305(b)"; and (2) inserting after "protection of" the phrase "public health,".

(2) Section 302(b) of the Clean Water Act is amended to read as follows:

"(b)(1) Prior to establishment of any effluent limitation pursuant to subsection (a) of this section, the Administrator shall publish such proposed limitation and within ninety days of such publication hold a public hearing.

"(2)(A) The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for pollutants other than toxic pollutants, if the applicant demonstrates at such hearing that (whether or not technology or other alternative control strategies are available) there is no reasonable relationship between the economic and social costs and the benefits to be obtained (including attainment of the objective of this Act) from achieving such limitation.

"(B) The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for toxic pollutants for a single period not to exceed five years, if the applicant demonstrates to the satisfaction of the Administrator that such modified requirements (1) will represent the maximum degree of control within the economic capability of the owner and operator of the source, and (2) will result in reasonable further progress beyond the requirements of section 301(b)(2) toward the requirements of subsection (a) of this section.".

(f) Section 304 of the Clean Water Act is amended by adding the following new subsection:

"(l) Not later than three years after the date of enactment of the Clean Water Act Amendments of 1985, the Administrator shall publish regulations providing guidelines for effluent limitations under subsection (b)(2) of this section and section 306 for categories of sources discharging significant amounts of toxic pollutants referred to in section 301(b)(2)(C), for which guidelines have not previously been published.".

INDIRECT DISCHARGE OF CONVENTIONAL POLLUTANTS

SEC. 107. Section 402 of the Clean Water Act is amended by adding at the end thereof the following new subsection:

"(m) In issuing a permit under this section, the Administrator shall not require pretreatment by dischargers of conventional pollutants identified pursuant to section 304(b)(4) of this Act as a substitute for municipal treatment adequate to meet the requirements of a permit issued under this section for a treatment works (as defined in section 212 of this Act) which is publicly owned if such discharger is in compliance with all applicable requirements of local pretreatment programs approved under subsection (b)(8) of this section. Nothing in this subsection shall affect the Administrator's authority under sections 307 and 309 of this Act, affect State and local authority under sections 307(b)(4) and 510 of this Act, relieve such treatment works of its obligations to meet requirements established under this Act, or preclude such works from pursuing whatever feasible options are available to meet its responsibility to comply with its permit under this section.".

CIVIL AND CRIMINAL PENALTIES

SEC. 108. (a) Section 309(d) of the Clean Water Act is amended by striking "$10,000" and inserting in lieu thereof "$25,000".

(b) No State shall be required to modify a permit program approved or submitted under section 402 of the Clean Water Act as a result of the amendment made by subsection (a) of this section before July 1, 1986.

(c) Section 309 of the Clean Water Act is amended by adding a new subsection (g) as follows:

"(g)(1) In addition to any other relief provided, whenever on the basis of any information available to him the Administrator finds that any person is in violation of section 301, 302, 303, 306, 307, 308, 318, or 504 of this Act, or is in violation of any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by him or by a State, or in a permit issued under section 404 of this Act by a State, he may after notifying the State in which the violation occurs assess a civil penalty of not more than $10,000 per day of violation, not to exceed $75,000 in total.

"(2) No civil penalty may be assessed under this subsection unless the person accused of the violation is given notice and opportunity for a hearing with respect to the violation. Such hearing shall not be subject to the requirements of section 554 or 556 of title 5, United States Code.

"(3) In determining the amount of any penalty assessed pursuant to this subsection, the Administrator shall take into account the nature, circumstances, extent and gravity of the violation or violations, and, with respect to the violator, ability to pay, any prior history of such violations, the degree of culpability, economic benefit or savings (if any) resulting from the violation, and such other matters as justice may require.

"(4) Any person against whom a civil penalty is assessed under this subsection may obtain review thereof in the appropriate district court of the United States by filing a notice of appeal in such court within thirty days from the date of such order and by simultaneously sending a copy of such notice by certified mail to the Administrator. The Administrator shall promptly file in such court a certified copy of the record upon which such violation was found or such penalty imposed. If any person fails to pay an assessment of a civil penalty after it has become a final and unappealable order or after the appropriate court has entered final judgment in favor of the Administrator, the Administrator may request the Attorney General of the United States to institute a civil action in an appropriate district court of the United States to collect the penalty, and such court shall have jurisdiction to hear and decide any such action. In hearing such action, the court shall have authority to review the violation and the assessment of the civil penalty de novo.

"(5) The Administrator may issue subpenas for the attendance and testimony of witnesses and the production of relevant papers, books, or documents in connection with hearings under this subsection. In case of contumacy or refusal to obey a subpena issued pursuant to this paragraph and served upon any person, the district court of the United States for any district in which such person is found, resides, or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the administrative law judge or to appear and produce documents before the administrative law judge, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

"(6) Action taken by the Administrator pursuant to this subsection shall not affect or limit the Administrator's authority to enforce any provision of this Act: *Provided, however*, That the discharge of pollutants which is penalized administratively under this subsection shall not be the subject of a civil penalty under section 309(d) or section 311(b) of this Act in a civil action commenced by the Administrator.".

(d) Section 309(c) of the Clean Water Act is amended to read as follows:

"(c)(1) Any person who (A) negligently violates section 301, 302, 303, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State, or who (B) negligently introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which causes or may reasonably be anticipated to cause personal injury or property damage, or causes such treatment works to violate any effluent limitation or condition in any permit issued to the treatment works under section 402 of this Act by the Administrator or a State, shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or by both.

"(2) Any person who (A) knowingly violates section 301, 302, 303, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State, or who (B) knowingly introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which causes or may reasonably be anticipated to cause personal injury or property damage, or causes such treatment works to violate any effluent limitation or condition in any permit issued to the treatment works under section 402 of this Act by the Administrator or a State, shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than one year, or by both.

"(3) Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or by both.

"(4) If a conviction is for a violation of paragraph (1), (2), or (3) of this subsection committed after a first conviction of such person under the same paragraph, the maximum punishment under the respective paragraph shall be doubled with respect to both fine and imprisonment.

"(5) For the purpose of paragraphs (1), (2), and (3), the term 'person' shall mean, in addition to the definition contained in section 502(5) of this Act, any responsible corporate officer.

"(6) For the purpose of paragraphs (1) and (2), the term 'hazardous substance' shall mean (A) any substance designated pursuant to section 311(b)(2)(A) of this Act, (B) any element, compound, mixture, solution, or substance designated pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress), (D) any toxic pollutant listed under section

307(a) of this Act, and (E) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act.".

PARTIAL NPDES PROGRAM APPROVAL

SEC. 109. (a) Section 402(b) of the Clean Water Act is amended by—

(1) inserting ", or part of a permit program in accordance with paragraph (10) of this subsection," immediately after "its own permit program" in the first full sentence; and

(2) adding at the end thereof the following new paragraph:

"(10) In the event a Governor submits a plan to administer part of a permit program, the Administrator may approve such plan upon a showing that—

"(A)(i) the plan provides for administration of permit program components which represent a significant and identifiable part of the State program authorized by this section; and

"(ii) the plan provides for and the State agrees to make all reasonable efforts to assume administration of the remainder of the program by a specified future date not to exceed five years from submission of the State's initial plan; or

"(B)(i) the plan provides for administration of a permit program for one or more discharge categories such as Federal facilities, municipal or industrial categories, or any other category of dischargers which represent a significant and identifiable part of the permit program in the State; and

"(ii) the plan covers all categories of discharges under the jurisdiction of the State agency or department responsible for administering the plan and represents a complete permit program for all categories of discharges contained in the plan. For purposes of the preceding sentence, 'a complete permit program,' means one for which adequate authority exists to carry out each of the activities listed in paragraphs (1) through (9) of this subsection.".

(b) Section 402(c)(1) of the Clean Water Act is amended by striking "as to those navigable waters" and inserting in lieu thereof "as to those activities and discharges".

(c) Section 402(c) of the Clean Water Act is amended by adding a new paragraph (4) as follows:

"(4) In the event a determination is made (A) by a State to return administration of the program to the Administrator or (B) by the Administrator to withdraw approval pursuant to paragraph (3) of this subsection, return of administration or withdrawal of approval may only be made of the entire program currently being administered by the State.".

NPDES PERMIT TERM AND REOPENER

SEC. 110. (a) Section 402(b)(1)(B) of the Clean Water Act is amended to read as follows:

"(B) are for fixed terms not exceeding ten years, unless a permit includes a waiver or modification of any otherwise applicable requirement under sections 301(c), (g), (h), or (m) of this Act, in which case such permit shall be for a fixed term not exceeding five years;".

(b) Section 402(b)(1)(D) of the Clean Water Act is redesignated as section 402(b)(1)(E), and a new section 402(b)(1)(D) is inserted after section 402(b)(1)(C) to read as follows:

"(D) shall be promptly modified whenever new or revised requirements under sections 301, 302, 303, 304, 307, 403, or 405 are established which are more stringent than any requirement in the permit or which control pollutants not limited in the permit and such modification implements these new or revised requirements;".

JUDICIAL REVIEW AND AWARD OF FEES

SEC. 111. (a) Section 509(b)(1) of the Clean Water Act is amended by (1) striking the phrase "transacts such business" and inserting in lieu thereof, "transacts business which is directly affected by such action"; and (2) striking "ninety" and "ninetieth" and inserting in lieu thereof "one hundred and twenty" and "one hundred and twentieth", respectively.

(b) Section 509(b) of the Clean Water Act is amended by adding at the end thereof the following new paragraphs:

"(3)(A) If applications for review of the same agency action have been filed under paragraph (1) of this subsection in two or more Circuit Courts of Appeals of the United States and the Administrator has received written notice of the filing of one or more applications within thirty days or less after receiving written notice of the filing of the first application, then the Administrator shall promptly advise in writing the Administrative Office of the United States Courts that applications have been filed in two or more Circuit Courts of Appeals of the United States, and shall identify each court for which he has written notice that such applications have been filed within thirty days or less of receiving written notice of the filing of the first such application. Pursuant to a system of random selection devised for this purpose, the Administrative Office thereupon shall, within three business days of receiving such written notice from the Administrator, select the court in which the record shall be filed from among those identified by the Administrator. Upon notification of such selection, the Administrator shall promptly file the record in such court. For the purpose of review of agency action which has previously been remanded to the Administrator, the record shall be filed in the Circuit Court of Appeals of the United States which remanded such action.

"(B) Where applications have been filed under paragraph (1) of this subsection in two or more Circuit Courts of Appeals of the United States with respect to the same agency action and the record has been filed in one of such courts pursuant to paragraph (3)(A), the other courts in which such applications have been filed shall promptly transfer such applications to the Circuit Court of Appeals of the United States in which the record has been filed. Pending selection of a court pursuant to paragraph (3)(A), any court in which an application has been filed under paragraph (1) of this subsection may postpone the effective date of the agency action until fifteen days after the Administrative Office has selected the court in which the record shall be filed.

"(C) Any court in which an application with respect to any agency action has been filed under paragraph (1) of this subsection, including any court selected pursuant to paragraph (3)(A), may transfer such application to any other Circuit Court of Appeals of the United States for the convenience of the parties or otherwise in the interest of justice.

"(4) In any judicial proceeding under this subsection, the court may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party whenever it determines that such award is appropriate.".

(c) Section 505(d) of the Clean Water Act is amended by inserting "prevailing or substantially prevailing" before "party" in the first sentence thereof.

NONPOINT SOURCE POLLUTION

SEC. 112. (a) Title III of the Clean Water Act is amended by adding the following new section:

"NONPOINT SOURCE POLLUTION MANAGEMENT PROGRAM

"SEC. 319. (a)(1) Each State, by itself or in combination with adjacent States, shall, after notice and opportunity for public comment, submit to the Administrator, within eighteen months after the date of enactment of the Clean Water Act Amendments of 1985, a proposed nonpoint source pollution management program which shall—

"(A) identify those waters within its boundaries which without additional action to control nonpoint sources of pollution cannot reasonably be expected to attain or maintain (i) applicable water quality standards, or (ii) the goals and requirements of the Act;

"(B) designate categories or subcategories of nonpoint sources of pollutants or, where appropriate, particular nonpoint sources, that contribute significant pollution loadings to the waters identified under subparagraph (A);

"(C) identify best management practices which will be undertaken to reduce pollutant loadings resulting from each category, subcategory or particular nonpoint source designated under subparagraph (B);

"(D) identify programs (including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects) to achieve implementation of the best management practices by the categories, subcategories, and particular nonpoint sources designated under subparagraph (B);

"(E) include a schedule containing annual milestones for (i) utilization of the program implementation methods identified in subparagraph (D), and (ii) implementation of the best management practices identified in subparagraph (C) by the categories, subcategories, or particular nonprofit sources designated under subparagraph (B). Such schedule shall provide for utilization of the program implementation methods and implementation of best management practices at the earliest practicable date;

"(F)(i) include a statement from the attorney general of such State or States (for the attorney for those State water pollution control agencies which have independent legal counsel) that the laws of such State or States, as the case may be, provide adequate authority to carry out the described program, or what additional authorities would be necessary to do so, and (ii) if this statement identifies additional needed authorities, include a schedule and commitment by the State to seek such authorities as expeditiously as practicable; and

"(G) include an identification of Federal financial assistance programs and Federal development projects for which the State will review individual assistance applications or development projects for their effect on water quality pursuant to the procedures set forth in Executive Order 12372 as in effect on September 17, 1983, to determine whether such assistance applications or development projects would be consistent with and further the purposes and objectives of the program prepared under this subsection. For the purposes of this paragraph, identification shall not be limited to the assistance programs or development projects subject to the Executive Order 12372 but may include any programs listed in the most recent Catalog of Federal Domestic Assistance which may have an effect on the purposes and objectives of the State's nonpoint source pollution management program.

"(2) In developing the nonpoint source management program required by this section, the State (A) may rely upon information developed pursuant to sections 208, 303(e), 304(f), and 305(b), and other information as appropriate, and (B) may utilize appropriate elements of the waste treatment management plans developed pursuant to section 208(b), to the extent such elements are consistent with and fulfill the requirements of this section.

"(3) In developing and implementing the management program described in this subsection, a State may make use of local agencies or organizations.

"(b)(1) Within six months of the date of receipt of a proposed nonpoint source management program, the Administrator shall, after notice and opportunity for public comment, make a determination whether the State's proposed management program meets the requirements of subsection (a)(1) of this section.

"(2) If the Administrator determines that the proposed management program does not meet the requirements of subsection (a)(1) of this section, he shall within six months of receipt of the proposed program notify the State of any revisions or modifications necessary to obtain approval. The State shall thereupon have an additional three months to submit its revised management program and the Administrator shall approve or disapprove such revised program within three months of receipt.

"(3) Pursuant to paragraph (1) or (2) of this subsection, the Administrator shall approve those State management programs that he determines meet the requirements of subsection (a)(1) of this section.

"(4) If the Administrator fails to approve the State management program pursuant to paragraph (1) of this subsection or fails to notify the State of necessary revisions pursuant to paragraph (2) of this subsection within six months of receipt of the State program, or if he fails to approve or disapprove the program pursuant to paragraph (2) of this subsection within three months of receipt of the revised program, the program shall be deemed to have been approved by the Administrator.

"(c) If a State fails to submit a nonpoint source pollution management program that the Administrator determines meets the requirements of subsection (a)(1) of this section, the Administrator shall notify such State, and within thirty months after the date of enactment of the Clean Water Act Amendments of 1985, after consultation with appropriate Federal and State agencies and other interested persons, carry out the requirements of subsections (a)(1) (A) and (B) of this section for such State. Upon completion of this requirement, the Administrator shall report to Congress on his actions pursuant to this section.

"(d)(1) The Administrator shall award grants, subject to such terms and conditions as the Administrator considers appropriate, to assist States in the implementation of management programs which have been approved pursuant to subsection (b) of this section. Such grants shall not exceed 75 per centum of the costs of implementing the program in any fiscal year and shall be made on condition that non-Federal sources provide at least 25 per centum of the costs that receive funding under this subsection.

"(2)(A) Two-thirds of the funds appropriated in any fiscal year for grants under this section shall be made available for allotment to the several States in accordance with the following table:

State	*Percentage allotment*
Alabama	1.56
Alaska	.50
Arizona	1.95
Arkansas	1.43
California	6.37
Colorado	2.19
Connecticut	.68
Delaware	.50
District of Columbia	.50
Florida	2.66
Georgia	2.04
Hawaii	.50
Idaho	1.20
Illinois	4.03
Indiana	2.07
Iowa	2.39
Kansas	2.78
Kentucky	1.32
Louisiana	1.56
Maine	.55

Maryland	1.03
Massachusetts	1.25
Michigan	2.67
Minnesota	2.43
Mississippi	1.40
Missouri	2.44
Montana	2.46
Nebraska	2.26
Nevada	1.78
New Hampshire	.50
New Jersey	1.62
New Mexico	1.93
New York	4.22
North Carolina	1.90
North Dakota	2.14
Ohio	3.14
Oklahoma	2.05
Oregon	1.75
Pennsylvania	2.97
Rhode Island	.50
South Carolina	1.09
South Dakota	1.94
Tennessee	1.50
Texas	8.08
Utah	1.36
Vermont	.50
Virginia	1.60
Washington	1.58
West Virginia	.60
Wisconsin	1.90
Wyoming	1.39
Guam	.10
Northern Marianas	.10
Pacific Trust Territories	.10
Puerto Rico	.72
Samoa	.10
Virgin Islands	.10
TOTAL	100.00

"(B) One-third of the funds appropriated in any fiscal year for grants under this section shall be made available to the Administrator who shall make grants in response to applications from States if the Administrator determines such grants are necessary and appropriate to assist such States in—

"(i) controlling particularly difficult or serious nonpoint source pollution problems, including, but not limited to, problems resulting from mining activities;

"(ii) implementing innovative methods or practices for controlling nonpoint sources of pollution, including both regulatory or nonregulatory programs where the Administrator deems appropriate;

"(iii) controlling interstate nonpoint source pollution problems; or,

"(iv) providing financial assistance for implementation by an Indian tribe, within the reservation, of an approved management program: *Provided,* That any such Indian tribe shall be subject to all terms and conditions of this section applying to a State. Financial assistance to any one reservation under this clause shall not exceed one-third of 1 per centum of the total amount appropriated for grants for each year.

"(3) The funds allotted to the States pursuant to paragraph (2)(A) of this subsection for a fiscal year shall remain available for obligation for the fiscal year for which appropriated. The amount of any such allotments not obligated by the end of such fiscal year and any unobligated funds remaining under paragraph (2)(B) of this subsection shall be reallotted by the Administrator for the next fiscal year on the basis of the table in paragraph (2)(A).

"(4) States may use funds from grants made pursuant to this section for financial assistance to persons only to the extent that such assistance is related to the costs of demonstration projects.

"(5) No grant shall be made to a State under this section unless the Administrator determines, on the basis of information provided by the State and from other relevant sources, that the State is implementing the program satisfactorily in terms of the requirements and objectives of this section.

"(6) The Administrator may request such information, data, and reports as he may deem necessary to make the determination of continuing eligibility for grants under this section.

"(7) For the purpose of this section, there are authorized to be appropriated, to remain available until expended, $70,000,000 for the fiscal year ending September 30, 1986, $100,000,000 for the fiscal year ending September 30, 1987, and $130,000,000 for the fiscal year ending September 30, 1988.

"(e) Each State shall report to the Administrator on an annual basis concerning (1) its progress in meeting the schedule of milestones submitted pursuant to subsection (a)(1)(E) of this section, and (2) to the extent that appropriate information is available, reductions in nonpoint source pollutant loading and improvements in water quality resulting from implementation of the management program.

"(f) The Administrator shall—

"(1) transmit to the Office of Management and Budget and the appropriate Federal departments and agencies a list of those assistance programs and development projects identified by each State under subsection (a)(1)(G) for which individual assistance applications and projects will be reviewed pursuant to the procedures set forth in Executive Order 12372 as in effect on September 17, 1983. Beginning not later than sixty days after receiving notification by the Administrator, each Federal department and agency shall modify existing regulations to allow States to review individual development projects and assistance applications under the identified Federal assistance programs and shall accommodate, according to the requirements and definitions of Executive Order 12372, as in effect on September 17, 1983, the concerns of the State regarding the consistency of such applications or projects with the State nonpoint source pollution management program;

"(2) collect and make available, through publications and other appropriate means, information pertaining to management practices and implementation methods, including, but not limited to, (A) information concerning the costs and relative efficiencies of best management practices for reducing nonpoint source pollution; and (B) available data concerning the relationship between water quality and implementation of various management practices to control nonpoint sources of pollution; and

"(3) submit to the Congress, within thirty six months of enactment of the Clean Water Act Amendments of 1985, a report which on the basis of information submitted by the States pursuant to subsections (a) and (e) of this section, and other information as appropriate:

"(A) describes the management programs being implemented by the States by types and amount of affected waters, categories and subcategories of nonpoint sources, and types of best management practices being implemented;

"(B) describes the experiences of the States in adhering to schedules and implementing best management practices;

"(C) describes the amount and purpose of grants awarded pursuant to subsection (d) of this section;

"(D) identifies, to the extent that information is available, the progress made in reducing pollutant loads and improving water quality in the waters of the United States; and

"(E) indicates what further actions need to be taken to attain and maintain in those waters (i) applicable water quality standards and (ii) the goals and requirements of the Act.".

(b) Section 304(k)(1) of the Clean Water Act is amended by inserting after the word "Act" the following: "and nonpoint source pollution management programs approved under section 319 of this Act.".

STORMWATER RUNOFF FROM MINING OPERATIONS

SEC. 113. Section 402(l) of the Clean Water Act is amended by inserting "(1)" after "(l)" and by adding the following new paragraph:

"(2) The Administrator shall not require a permit under this section nor impose effluent limitations, nor shall the Administrator directly or indirectly require any State to require such a permit or impose such limitations, for discharges of stormwater runoff from mining operations or oil or gas exploration, production, processing, or treatment operations, composed entirely of flows from conveyances or systems of conveyances (including pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and not contaminated with process wastes, overburden, raw materials, toxic pollutants, hazardous substances in excess of reportable quantities, or oil or grease.".

ANTI-BACKSLIDING

SEC. 114. (a) Section 402 of the Clean Water Act is amended by adding the following new subsection:

"(n) In the case of effluent limitations established on the basis of subsection (a)(1)(B) of this section, a permit may not be renewed, reissued or modified solely on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit. If the source has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, the limitations in the renewed, reissued or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance or modification).".

(b) Section 402(a)(1) of the Clean Water Act is amended by inserting "(A)" after "either" and by inserting "(B)" after "this Act, or".

SEWAGE SLUDGE

SEC. 115. (a) Section 405(d) of the Clean Water Act is amended by inserting "(1)" after "(d)", by striking "(1)", "(2)" and "(3)" and inserting in lieu thereof "(A)", "(B)" and "(C)", and by adding the following new paragraph:

"(2)(A)(i) Not later than six months after the enactment of the Clean Water Act Amendments of 1985, the Administrator shall identify those toxic pollutants which on the basis of available information on their toxicity, persistence, concentration, mobility, or potential for exposure, may be present in sewage sludge in concentrations which may adversely affect public health or the environment.

"(ii) Not later than eighteen months after enactment of the Clean Water Act Amendments of 1985, the Administrator shall identify those toxic pollutants not identified under subparagraph (A)(i) which may be present in sewage sludge in concentrations which may adversely affect public health or the environment.

"(B)(i) Not later than eighteen months after the enactment of the Clean Water Act Amendments of 1985, the Administrator shall publish regulations specifying acceptable management practices for sewage sludge containing each toxic pollutant identified under subparagraph (A)(i) and establishing numerical limitations for each such pollutant for each use identified under paragraph (1)(A). Such management practices and numerical limitations shall be adequate to protect public health and the environment from any reasonably anticipated adverse effects of such pollutant. Such regulations shall require compliance no later than six months after their publication.

"(ii) Not later than thirty months after the enactment of the Clean Water Act Amendments of 1985, the Administrator shall publish regulations specifying acceptable management practices for sewage sludge containing each toxic pollutant identified under subparagraph (A)(ii) and establishing numerical limitations for each such pollutant for each such use identified under paragraph (1)(A). Such management practices and numerical limitations shall be adequate to protect public health and the environment from any reasonably anticipated adverse effects of such pollutant. Such regulations shall require compliance no later than six months after their publication.

"(iii) For purposes of this subparagraph, if, in the judgment of the Administrator, it is not feasible to prescribe or enforce a numerical limitation for a pollutant identified under paragraph (2)(A), he may instead promulgate a design, equipment, management practice, or operational standard, or combination thereof, which in his judgment is adequate to protect public health and the environment from any reasonably anticipated adverse effects of such pollutant. In the event the

Administrator promulgates a design or equipment standard under this subsection, he shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

"(C) Nothing in this section authorizes the establishment of any requirement or time for compliance which is less stringent than required by any other law.".

(b)(1) Section 308(a)(4) of the Clean Water Act is amended by inserting "405," before the phrase "and 504".

(2) Section 505(f) of the Clean Water Act is amended by striking "or" where it appears before "(6)", and inserting before the period a semicolon and the following: "or (7) a regulation under section 405(d) of this Act,".

(3) Section 509(b)(1)(E) of the Clean Water Act is amended by striking "or 306" and inserting in lieu thereof "306, or 405".

INTERSTATE DISPUTE RESOLUTION

SEC. 116. (a) Section 402(d)(2) of the Clean Water Act is amended by inserting "(A)" after "(2)", by striking "(A)" and "(B)" and inserting in lieu thereof "(i)" and "(ii)" respectively, and by adding the following subparagraph:

"(B) In the case of the failure of any State to accept the recommendations of another State whose waters may be affected by the issuance of a permit, submitted in accordance with subsection (b)(5), the Administrator shall determine whether any violation of a water quality requirement (including any standard) of the affected State or adverse effect on public health of the affected State will result from the issuance of such permit. If the Administrator so determines, the Administrator shall object to the issuance of such permit. Any such determination shall be provided in writing to the affected State and such determination or such objection shall be reviewable in the appropriate Circuit Court of Appeals under section 509(b) of this Act as the issuance or denial of a permit under section 402.".

(b) Section 402(b)(1) of the Clean Water Act is amended by adding the following:

"(F) shall be reconsidered for termination or modification at any time a State other than that in which the source is located provides notice that the permitted discharge is causing the violation of a water quality requirement (including any standard) of such State or adversely affecting the public health of such State and seeks a modification of such permit;".

(c) Section 511 of the Clean Water Act is amended by adding a new subsection (e) as follows:

"(e) Any State or municipality the water quality of which is adversely affected by pollutants from another State may petition the Administrator who, upon determining on the record after opportunity for Agency hearing pursuant to 5

U.S.C. 554, 556, and 557 that such pollution is causing the violation of a water quality requirement (including any standard) of such State or adversely affecting the public health of such State, shall issue an order restraining any person causing or contributing to such pollution or providing such other relief as is appropriate, taking into account the goals and requirements of this Act and other equitable considerations. In no case shall such order or other relief based solely on this subsection supersede or abrogate rights to quantities of water which have been established by interstate water compacts, Supreme Court decrees, or State water laws. This subsection shall not apply in any case in which section 402(d)(2)(B) or section 402(b)(1)(F) is available.".

PRESERVATION OF OTHER RIGHTS

SEC. 117. (a) Section 505(e) of the Clean Water Act is amended by inserting "(1)" after "(e)" and by adding the following new paragraphs:

"(2)(A) Nothing in this Act shall be construed, interpreted, or applied to displace, preempt, or limit the rights or liabilities of any person under State common law. Any person injured by an act or activity within the field covered by this Act may file an action and be granted relief which is provided under the statutory or common law of the State in which such person resides or the State in which the claim arose.

Such action may be filed in Federal district court in accordance with section 1332 of title 28, United States Code.

"(B) Nothing in this Act shall affect or modify in any way the liabilities of any person under other Federal statutes for damages caused by noncompliance with any requirement of this Act or any permit issued under this Act.

"(3) In any case involving the application of State common or statutory law to an instance where a discharge of pollutants arising in another State is alleged to have an adverse effect on the public health or welfare or the attainment of any water quality requirement of such State or municipality, a State or municipality shall be considered a citizen of such State for the purpose of filing an action in, or seeking removal to, a Federal district court to section 1332 of title 28, United States Code.".

(b) The amendments made by this section shall not apply in any dispute involving claims of interstate water pollution, wherein a State or municipality is the defending party, which is pending as of the enactment of this Act (or has been finally adjudicated), and on which the Supreme Court of the United States has rendered a decision.

HAZARDOUS WASTE PRETREATMENT STUDY

SEC. 118. Section 516 of the Clean Water Act is amended by adding the following new subsection at the end thereof:

"(f) The Administrator shall, not later than two years after the date of the enactment of the Clean Water Act Amendments of 1985, submit a report to the Congress concerning hazardous wastes identified or listed under section 3001 of the Solid Waste Disposal Act which are excluded from regulation pursuant to subtitle C of the Solid Waste Disposal Act under regulations exempting mixtures of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works for treatment. Such report shall specify the types and quantities of such hazardous wastes which are exempted pursuant to such regulations and shall include recommendations respecting whether or not other provisions of law applicable to such mixtures are adequate to protect human health and the environment from hazards associated with such wastes or whether regulation of such mixtures under subtitle C of the Solid Waste Disposal Act is necessary for such purpose.".

AD VALOREM TAX DEDICATION

SEC. 119. For the purposes of complying with section 204(b)(1) of the Clean Water Act, the ad valorem tax user charge system of the Town of Hampton, New Hampshire, shall be deemed to have been dedicated as of December 27, 1977. The Administrator of the Environmental Protection Agency shall review such ad valorem tax user charge system for compliance with the remaining requirements of section 204(b)(1) and related regulations of the Agency.

LIMITATION ON DISCHARGE OF RAW SEWAGE BY NEW YORK CITY

SEC. 120. (a)(1) If the wastewater treatment plant identified in the consent decree as the North River plant has not achieved advanced preliminary treatment as required under the terms of the consent decree by August 1, 1986, the city of New York shall not discharge raw sewage from the drainage area of such plant (as defined in the consent decree) into navigable waters after such date in an amount which is greater for any thirty-day period than an amount equal to thirty times the average daily amount of raw sewage discharged from such drainage area during the twelve-month period ending on the earlier of the date on which such plant becomes operational or March 15, 1986 (as determined by the Administrator of the Environmental Protection Agency), except as provided in subsection (b).

(2) If the wastewater treatment plant identified in the consent decree as the Red Hook plant has not achieved advanced preliminary treatment as required under the terms of the consent decree by August 1, 1987, the city of New York shall not discharge raw sewage from the drainage area of such plant (as defined in the consent decree) into navigable waters after such date in an amount which is greater for any thirty-day period than an amount equal to thirty times the

average daily amount of raw sewage discharged from such drainage area during the twelve-month period ending on the earlier of the date on which such plant becomes operational or March 15, 1987 (as determined by the Administrator of the Environmental Protection Agency), except as provided in subsection (b).

(b)(1) In the event of any significant interruption in the operation of the North River plant or the Red Hook plant caused by an event described in subparagraph (A), (B), or (C) of paragraph (5) occurring after the applicable deadline established under subsection (a), the Administrator of the Environmental Protection Agency shall waive the limitation of subsection (a) with respect to such plant, but only to such extent and for such limited period of time as may be reasonably necessary for the city of New York to resume operation of such plant.

(2) In the event that the volume of precipitation occurring after the applicable deadline established under subsection (a) causes the discharge of raw sewage to exceed the limitation under subsection (a), the Administrator of the Environmental Protection Agency shall waive the limitation of subsection (a) with respect to either or both such plants, but only to such extent and for such limited period of time as the Administrator determines to be necessary to take into ac-

count the increased discharge caused by such volume of precipitation.

(3) In the event that an increase in discharges from the North River drainage area constituting a violation of subsection (a)(1) is due to a random or seasonal variation, and that any sewer hookup occurring, or permit for a sewer hookup granted, after July 31, 1986, is not responsible for such violation, the Administrator of the Environmental Protection Agency shall waive the limitation of subsection (a)(1), but only to such extent and for such limited period of time as the Administrator determines to be reasonably necessary to take into account such random or seasonal variation.

(4) In the event that an increase in discharges from the Red Hook drainage area constituting a violation of subsection (a)(2) is due to a random or seasonal variation, and that any sewer hookup occurring, or permit for a sewer hookup granted, after July 31, 1987, is not responsible for such violation, the Administrator of the Environmental Protection Agency shall waive the limitation of subsection (a)(2), but only to such extent and for such limited period of time as the Administrator determines to be reasonably necessary to take into account such random or seasonal variation.

(5) The Administrator of the Environmental Protection Agency shall extend either deadline under paragraph (1) or (2) of subsection (a) to such extent and for such limited period

of time as may be reasonably required to take into account any—

(A) act of war,

(B) unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight, or

(C) other circumstances beyond the control of the city of New York, such circumstances not to include (i) the unavailability of Federal funds under section 201 of the Federal Water Pollution Control Act, (ii) the unavailability of funds from the city of New York or the State of New York, or (iii) a policy decision made by the city of New York or the State of New York to delay the achievement of advanced preliminary treatment at the North River plant or Red Hook plant beyond the applicable deadline in subsection (a).

(c) Except as otherwise provided in subsection (b), any violation of subsection (a) shall be considered to be a violation of section 301 of the Federal Water Pollution Control Act, and all provisions of such Act relating to violations of such section 301 shall apply.

(d) For purposes of this section, the "consent decree" is the consent decree entered into by the Environmental Protection Agency, the city of New York, and the State of New York, on December 30, 1982, relating to construction and operation of the North River and Red Hook wastewater treatment plants.

(e) The Administrator of the Environmental Protection Agency shall work with the city of New York to eliminate the discharge of raw sewage by such city at the earliest practicable date.

(f) Nothing in this section shall be construed as modifying the terms of the consent decree.

(g) It is the sense of the Congress that the Administrator of the Environmental Protection Agency should not agree to any further modification of the consent decree with respect to the schedule for achieving advanced preliminary treatment.

(h)(1) The provisions of this section shall remain in effect with respect to the North River drainage area until such time as the North River plant has achieved advanced preliminary treatment (as defined in the consent decree) for a period of six consecutive months.

(2) The provisions of this section shall remain in effect with respect to the Red Hook drainage area until such time as the Red Hook plant has achieved advanced preliminary treatment (as defined in the consent decree) for a period of six consecutive months.

(i) The Administrator of the Environmental Protection Agency shall establish and carry out a program for the monitoring activities which may be required under subsection (a) by December 1, 1984. The Administrator of the Environmental Protection Agency shall establish the methodologies, data base, and any other information required for making determinations under subsection (b) for the North River drainage area (as defined in the consent decree) by July 31, 1986, unless the requirements of subsection (h)(1) have been satisfied, and for the Red Hook drainage area (as defined by the consent decree) by July 31, 1987, unless the requirements of subsection (h)(2) have been satisfied. In carrying out such program, if the Administrator finds that a violation of subsection (a) has occurred, the Administrator shall also determine, within thirty days after such finding, whether a provision of subsection (b) applies. If the Administrator requires information from the city of New York in order to determine whether a provision of subsection (b) applies, the Administrator shall request such information. If the city of New York does not supply the information requested by the Administrator, the Administrator shall determine that subsection (b) does not apply. The city of New York shall be responsible only for such expenses as are necessary to provide such requested information. Enforcement action pursuant to subsection (c) shall be commenced at the end of such thirty days unless a provision of subsection (b) applies.

TITLE II—CONSTRUCTION GRANT AMENDMENTS

AUTHORIZATION

SEC. 201. Section 207 of the Clean Water Act is amended by striking "and September 30, 1985," and inserting in lieu thereof "September 30, 1985, September 30, 1986, September 30, 1987, September 30, 1988, September 30, 1989, and September 30, 1990,".

ALLOCATION

SEC. 202. (a) Section 205(c) of the Clean Water Act is amended by adding the following new paragraph:

"(3) Sums authorized to be appropriated pursuant to section 207 for the fiscal year 1986, 1987, 1988, 1989, and 1990 shall be allotted for each such year by the Administrator not later than the tenth day which begins after the date of enactment of the Clean Water Act Amendments of 1985. Sums authorized for such fiscal years shall be allotted in accordance with the following table:

States:
Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Idaho

Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
Samoa
Guam
Northern Marianas
Puerto Rico
Pacific Trust Territories
Virgin Islands

(b) Section 207(e) of the Clean Water Act is amended by striking "and 1985," each place it appears and inserting in lieu thereof "1985, 1986, 1987, 1988, 1989, and 1990,".

SET ASIDES

SEC. 203. (a) Section 207(g)(1) of the Clean Water Act is amended by striking "1985" and inserting in lieu thereof "1990".

(b) Section 207(i) of the Clean Water Act is amended by striking "and September 30, 1985," and inserting in lieu thereof "September 30, 1985, September 30, 1986, September 30, 1987, September 30, 1988, September 30, 1989, and September 30, 1990".

II

99TH CONGRESS
1ST SESSION

S. 652

To amend the Clean Water Act, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 7 (legislative day, FEBRUARY 18), 1985

Mr. CHAFEE (for himself, Mr. STAFFORD, Mr. BENTSEN, and Mr. MITCHELL) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

A BILL

To amend the Clean Water Act, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Construction Grants Transition Act of 1985".

CONSTRUCTION GRANT AUTHORIZATION

SEC. 2. (a) Section 207 of the Clean Water Act is amended by striking out the period at the end thereof and adding the following: "; and to carry out this title, other than sections 206(e), 208, and 209, subject to such amounts as are provided in appropriation Act, for each of the fiscal years ending September 30, 1986, September 30, 1987, and September 30, 1988, not to exceed $2,400,000,000; and for each of the fiscal years ending September 30, 1989, and September 30, 1990, not to exceed $1,200,000,000.".

(b) Section 205(e) is amended by striking, ", 1979, 1980, 1981, 1982, 1983, 1984, and 1985" in the first and second sentences and inserting in each place in lieu thereof "through 1994".

STATE WATER POLLUTION CONTROL REVOLVING FUNDS

SEC. 3. The Clean Water Act is amended by adding at the end thereof the following new title:

"TITLE VI—GRANTS FOR WATER POLLUTION CONTROL REVOLVING FUNDS

"AUTHORIZATION, ALLOTMENT, AWARD, AND PAYMENT

"SEC. 601. (a) There are hereby authorized to be appropriated the following sums to carry out the purposes of this title:

"(1) $1,200,000,000 per fiscal year for the fiscal years 1989 and 1990;

"(2) $2,400,000,000 for the fiscal year 1991;

"(3) $1,800,000,000 for the fiscal year 1992;

"(4) $1,200,000,000 for the fiscal year 1993; and

"(5) $600,000,000 for the fiscal year 1994.

"(b) Sums appropriated to carry out this title for each fiscal year shall be allotted by the Administrator in accordance with section 205(c) of this Act.

"(c) Sums allotted to the States for a fiscal year shall be available for a grant award under subsection (d) during the fiscal year for which authorized. The amount of any allotment not obligated by the end of such fiscal year shall be immediately reallotted by the Administrator on the basis of the same ratio as is applicable to sums allotted under title II of this Act for the next fiscal year, except that none of the funds reallotted by the Administrator will be allotted to any State which failed to obligate any of the funds being reallotted.

"(d) If a State has entered into a grant agreement with the Administrator as provided in section 602 of this title, the Administrator is authorized to make a capitalization grant to the State from funds available for obligation under this title.

"(e) From funds obligated for a given fiscal year pursuant to subsection (d) of this section, quarterly installment payments shall be made in accordance with the schedule of payments established under section 602(b)(2) of this title.

"(f) If the Administrator determines that a State has not complied with agreements under section 602, or requirements of this title, the Administrator shall notify the State of such noncompliance and the necessary corrective action. If the State does not take such corrective action by the sixtieth day after the date the State receives notice, the Administrator shall withhold additional payments to the State until the

Administrator is satisfied that the State has taken the necessary corrective action.

"(g) If the Administrator is not satisfied that adequate corrective actions have been taken by the State within twelve months of the notice provided under subsection (f) of this section, the payments withheld by the Administrator shall be made available for reallotment under subsection (c) of this section.

"CAPITALIZATION GRANT AGREEMENTS WITH STATES

"SEC. 602. (a) To receive a capitalization grant under this title, a State shall enter into an agreement with the Administrator which shall include but not be limited to the specifications set forth in subsection (b) of this section.

"(b) The Administrator shall enter into an agreement with a State only after the State has established to the satisfaction of the Administrator that—

"(1) the State has established a Water Pollution Control Revolving Fund, as defined in section 603 of this title;

"(2) the State has agreed to accept grant payments under this title in accordance with a payment schedule established by the Administrator, and has agreed to deposit all such payments in the dedicated revolving fund;

"(3) the State has agreed to deposit in the fund, from State monies, an amount equal to 15 per centum of the capitalization grant, and has further agreed to make such necessary matching deposits by no later than the date of each grant payment under the provisions of paragraph (2) of this subsection;

"(4) the State has agreed to make binding loan commitments in an amount equal to 100 per centum of the amount of the grant payments within one year of the receipt of such funds;

"(5) the State has made adequate assurances through submission of an intended use report under section 604(c) of this title that (A) all funds available in the Water Pollution Control Revolving Fund will be committed in an expeditious and timely manner, (B) treatment works projects that are constructed in whole or in part prior to fiscal year 1995 with funds from the State Water Pollution Control Revolving Fund will meet the same requirements applicable to grant projects funded under title II, and (C) such funds will first be used to assure maintenance of progress in the completion of all projects needed to meet the enforceable deadlines, goals, and requirements of this Act;

"(6) in addition to meeting the requirements of this title, the State has made assurances that it will commit or expend the payments so received in accordance with laws and procedures applicable to the commitment or expenditure of revenue of the State;

"(7) in carrying out the requirements of section 604 of this title, the State will use accounting, audit, and fiscal procedures conforming to generally accepted government accounting standards;

"(8) the State will require as a condition of making a loan that recipients will maintain project accounts in accordance with generally accepted government accounting standards; and

"(9) the State will make annual reports to the Administrator on the actual use of funds in accordance with section 604(d) of this title.

"STATE WATER POLLUTION CONTROL REVOLVING FUNDS

"SEC. 603. (a) To be eligible for an award of a grant under section 601 of this title, each State shall establish a Water Pollution Control Revolving Fund, administered by an instrumentality of the State with powers and limitations including those specified in subsections (b), (c), and (d) of this section.

"(b) The amounts of funds available to the Water Pollution Control Revolving Fund shall be dedicated solely to providing financial assistance to any municipality, intermunicipal, interstate, or State agency for construction of publicly owned treatment works (as defined in section 212(2) of title II of this Act). The fund shall be established, maintained, and credited with repayments, and the fund balance shall be available in perpetuity for this purpose.

"(c) The instrumentality of the State administering the Water Pollution Control Revolving Fund shall be authorized to use the fund to make loans, on the condition that—

"(1) such loans are made at or below market interest rates, including interest free loans, at terms not to exceed twenty years or the design life of the facility to be constructed, whichever is less;

"(2) annual principal payments shall commence not later than one year after completion of any project and all loans shall be fully amortized not later than twenty years after project completion;

"(3) the recipient of a loan shall establish a dedicated source of revenue for repayment of loans; and

"(4) the fund shall be credited with all repayment of principal and interest on all loans.

"(d) Except as otherwise limited by State law, a Water Pollution Control Revolving Fund may be used—

"(1) to buy or refinance the debt obligation of municipalities and intermunicipal and interstate agencies within the State at or below market rates, where such debt obligations were incurred after March 7, 1985.

"(2) to guarantee, or purchase insurance for, local obligations where such action would improve credit market access or reduce interest rates;

"(3) as a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by the State if the proceeds of the sale of such bonds are deposited in the Water Pollution Control Revolving Fund;

"(4) to earn interest on fund accounts; and

"(5) for the reasonable costs of administering the fund and conducting activities under this title provided that such amounts shall not exceed 4 per centum of all grant awards to such fund under section 601(d).

"AUDITS, REPORTS, AND FISCAL CONTROLS

"SEC. 604. (a) Each State electing to establish a Water Pollution Control Revolving Fund under this title shall establish fiscal controls and accounting procedures sufficient to assure proper accounting during appropriate accounting periods for—

"(1) payments received by the fund;

"(2) disbursements made by the fund; and

"(3) fund balances at the beginning and end of the accounting period.

"(b) The Administrator shall conduct, or require each State to have conducted, not less than annually, an independent audit to review the operations of each Water Pollution

Control Revolving Fund. Such audits shall be conducted by an entity independent of the State, and in accordance with the Comptroller General's standards for auditing government organizations, programs, activities, and functions. An audit under this subsection shall be completed in such time and manner as deemed necessary or appropriate by the Administrator to carry out the purposes of this title.

"(c)(1) Each State shall, on an annual basis, prepare a plan on the intended uses of the amounts available to the fund. The plan shall include—

"(A) a description of the short and long term goals and objectives of the State's Water Pollution Control Revolving Fund;

"(B) information on the activities to be supported, including a description of project categories, discharge requirements under titles III and IV, terms of financial assistance, and communities served;

"(C) assurances and specific proposals for meeting the requirements of section 602(b) (4) and (5) of this title; and

"(D) the criteria and method established for the distribution of funds.

"(2) To meet the requirements of this subsection and to facilitate comments from interested local governments and persons on the use of funds, a State may adapt or use priority systems and lists developed under section 216 of the Act.

"(d) Beginning the first fiscal year after the receipt of payments under section 601(e) of this title, the State shall provide an annual report to the Administrator describing how the State has met the goals and objectives for the previous fiscal year as identified in the plan prepared for the previous fiscal year pursuant to subsection (c) of this section, including identification of loan recipients, loan amounts, and loan terms.

"(e) The Administrator shall conduct an annual review of each State plan and report prepared under subsections (c) and (d) of this section, and other such materials as are considered necessary and appropriate in carrying out the purposes of this title. After reasonable notice by the Administrator to the State or the recipient of a loan from a Water Pollution Control Revolving Fund, the State or loan recipient shall make available to the Administrator records the Administrator reasonably requires to review and determine compliance with this title.".

STATE-OPTION TO USE TITLE II FUNDS

SEC. 4. Section 205 is amended by adding a new subsection as follows

"(l)(1) The Administrator is authorized to award from funds available for obligation during each fiscal year ending September 30, 1986, September 30, 1987, September 30, 1988, September 30, 1989, September 30, 1990, September 30, 1991, September 30, 1992, September 30, 1993, and September 30, 1994, a capitalization grant to a State for the purpose of capitalizing a Water Pollution Control Revolving Fund pursuant to title VI of this Act, where the Governor requests such action in accordance with paragraph (2) of this subsection.

"(2) No later than thirty days after the date of enactment of this Act with respect to funds available for obligation in the fiscal year beginning October 1, 1985, and not less than ninety days prior to the start of each of the fiscal years beginning October 1, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, and 1994, a State shall provide notice of its intent to use all or a portion of the funds available for obligation in that fiscal year as a capitalization grant for a Water Pollution Control Revolving Fund under title VI of this Act.

"(3) Any sum made available to a State's Water Pollution Control Revolving Fund under this subsection shall be in addition to any funds otherwise allotted to that State under section 601(b) during any fiscal year.

REPORT TO CONGRESS

SEC. 5. Section 516 of the Clean Water Act is amended by adding at the end thereof the following new subsection:

"(f) The Administrator shall submit to the Congress by February 10, 1990, a report on the financial status and operations of Water Pollution Control Revolving Funds established by the States in accordance with title VI of this Act. The Administrator, in cooperation with the States, including water pollution control agencies and other water pollution control planning and financing agencies, shall include in such report the following:

"(1) an inventory of the facilities that are in significant noncompliance with the enforceable requirements of this Act;

"(2) an estimate of the cost of construction for such facilities that require construction to meet such requirements;

"(3) an assessment of the availability of sources of funds for financing such needed construction, including an estimate of the amount of funds available for loans through September 30, 1999, from the Water Pollution Control Revolving Funds established by the States under title VI of this Act;

"(4) an assessment of the operations, loan portfolio and loan conditions of Water Pollution Control Revolving Funds established by the States under title VI of this Act; and

"(5) an assessment of the efficiency of the operation and maintenance of treatment works constructed with financial assistance under titles II and VI of this Act.".

ELIGIBILITIES AFTER 1990

SEC. 6. (a) Section 202(a)(1) of the Clean Water Act is amended by striking out the period at the end thereof and adding the following: ", for any such grants made before October 1, 1990.".

(b) Section 204(c) of the Clean Water Act is amended by inserting "awarded a grant before October 1, 1990," after the words "such facility and interceptors".

(c) 205(g)(1) of the Clean Water Act is amended by striking "October 1, 1985" and inserting in lieu thereof "October 1, 1994".

INNOVATIVE AND ALTERNATIVE PROJECTS

SEC. 7. Section 205(i) of the Clean Water Act is amended to read as follows:

"(i) Not less than one-half of 1 per centum of funds allotted to a State for each of the fiscal years ending September 30, 1979, through September 30, 1988, under subsection (c) of this section shall be expended only for increasing the Federal share of grants for construction of treatment works utilizing innovative processes and techniques pursuant to section 202(a)(2) of this Act. Including the expenditures authorized by the preceding sentence, a total of 2 per centum of the funds allotted to a State for each of the fiscal years ending September 30, 1979, and September 30, 1980, and 3 per centum of the funds allotted to a State for the fiscal year ending September 30, 1981, under subsection (c) of this section shall be expended only for increasing grants for construction of treatment works pursuant to section 202(a)(2) of this Act. Including the expenditures authorized by the first sentence of this subsection, a total (as determined by the Governor of the State) of not less than 4 per centum nor more than 7½ per centum of the funds allotted to such States under subsection (c) of this section for each of the fiscal years ending September 30, 1982, through September 30, 1986, and of not less than 2 per centum nor more than 7½ per centum for each of the fiscal years ending September 30, 1987, and September 30, 1988, shall be expended only for increasing the Federal share of grants for construction of treatment works pursuant to section 202(a)(2) of this Act. For each of the fiscal years beginning on or after October 1, 1988, up to 7½ per centum of funds allotted to a State under subsection (c) of this section for making grants under this title may be expended for increasing the Federal share of grants for construction of treatment works pursuant to section 202(a)(2) of this Act.".

NONCONVENTIONAL WAIVER DEADLINE

SEC. 8. (a) Section 301(j)(1)(B) of the Clean Water Act is amended by inserting immediately at the end thereof the following: "In addition to the above requirement a completed application for a modification under subsection (g) must have been filed not later than January 3, 1985, and each completed application for a modification under subsection (g) pending on the date of enactment of the Clean Water Act Amendments of 1985, shall be deemed ineligible for such modification unless the Administrator, with the concurrence of the State, has issued a tentative decision prior to the date of enactment of such amendments.".

(b) Section 301(g)(1) is amended by inserting "(i)" immediately after "subsection (b)(2)(A)".

SEC. 9. Title III of the Clean Water Act is amended by adding at the end thereof the following new section:

"NATIONAL ESTUARY PROGRAM

"SEC. 320. (a)(1) Whenever the Administrator determines that the attainment and maintenance of the chemical, physical, and biological integrity of an estuary requires the interstate or international control of sources of pollution to supplement existing controls, the Administrator shall convene, for a period not to exceed five years, an estuarine management conference, to—

"(A) assess trends in water quality, natural resources, and uses of the estuary;

"(B) collect, characterize, and assess data on toxics, nutrients, and natural resources within the estuarine zone to identify the causes of environmental problems;

"(C) develop the relationship between the inplace loads and point and nonpoint loadings of pollutants to the estuarine zone and the potential uses of the zone, water quality, and natural resources;

"(D) develop a comprehensive conservation and management plan that recommends priority corrective actions and compliance schedules addressing point and nonpoint sources of pollution to restore and maintain the chemical, physical, and biological integrity of the estuary, including restoration and maintenance of water quality, a balanced indigenous population of shellfish, fish and wildlife, and recreational activities in the estuary, and assure that the designated uses of the estuary are protected;

"(E) develop plans for the coordinated implementation of the plan by the States as well as Federal and local agencies participating in the conference;

"(F) monitor the effectiveness of actions taken pursuant to the plan; and

"(G) review any Federal financial assistance program or federal development project subject to the requirements of Executive Order 12372, as in effect on September 17, 1983, to determine whether such assistance program or project would be consistent with and further the purposes and objectives of any plan prepared under this section. For purposes of this subparagraph, these programs and projects shall not be limited to the assistance programs or development projects subject to Executive Order 12372, but may include any programs listed in the most recent Catalog of Federal Domestic Assistance which may have an effect on the purposes and objectives of any plan developed pursuant to this section.

"(b) The members of a management conference convened under this section shall include, at a minimum, the Administrator and representatives of—

"(1) each State and foreign nation located in whole or in part in the estuarine zone of the estuary for which the conference is convened;

"(2) international, interstate, or regional agencies having jurisdiction over all or a significant part of the estuary;

"(3) each interested Federal agency, as determined appropriate by the Administrator;

"(4) local governments within the estuarine zone, as determined appropriate by the Administrator; and

"(5) affected industries, public and private educational institutions and the general public in the estuarine zone.

"(c) Prior to developing a comprehensive conservation and management plan under this section, the management conferees shall survey and use existing reports, data, and studies as well as local master or regional plans relating to the estuary that have been developed by or made available to Federal, interstate, international, State, or local agencies.

"(d)(1) Not later than ninety days after the completion of a conservation and management plan, the Administrator shall, if the plan satisfies the purposes of this section and the affected Governor or Governors concur, approve such plan.

"(2) Upon approval of a conservation and management plan under this section, funds authorized to be appropriated under titles II and VI and section 319 of this Act may be used in accordance with the applicable requirements of this Act, to assist States with the implementation of such plan.

"(e) There are authorized to be appropriated to the Administrator not to exceed $10,000,000 per fiscal year for each of the fiscal years 1986, 1987, 1988, and 1990, for:

"(1) expenses related to the administration of management conferences under this section, not to exceed 10 per centum of the amount appropriated under this paragraph;

"(2) grants to State, interstate or regional water pollution control agencies for research, surveys, studies, monitoring, modeling, and other technical work necessary for the development of a conservation and management plan under this section: *Provided,* That such grants shall not exceed 75 per centum of the costs of such technical work and shall be made on condition that non-Federal sources provide at least 25 per centum of the costs that receive funding under this paragraph; and

"(3) the costs of monitoring the implementation of a conservation and management plan. Such monitoring shall be done by the management conference or, in any case in which the conference has expired or been terminated, by the Administrator.

"(f) Any State, interstate, or regional agency that receives a grant under subsection (e) shall report to the Administrator not later than eighteen months after receipt of such grant and biennially thereafter on the progress being made under this section.

"(*g*) For the purposes of this section, the terms 'estuary' and 'estuarine zone' shall have the same meanings such terms have in section 104(n)(4) of this Act, except that the term 'estuarine zone' shall include those portions of tributaries draining into the estuary up to the historic height of migration of anadromous fish or the historic head of tidal influence, whichever is higher.".

AMENDING THE CLEAN WATER ACT

WEDNESDAY, MARCH 27, 1985

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, DC.

The subcommittee met at 9:30 a.m., in room SD-406, Dirksen Senate Office Building, Hon. John Chafee (chairman of the subcommittee) presiding.

Present: Senators Chafee, Mitchell, and Lautenberg.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Today we will continue with the second day of our hearing on the Clean Water Act.

It was my understanding that Senator Kasten and Senator Cranston are both anxious to testify. I do not see them in the room. Is there any representative of theirs here? It is my understanding that Senator Kasten is on his way. He will be the first witness.

In addition to the two Senators, we are going to hear from representatives of cities, States, engineers, and others who construct publicly owned treatment works. We are also going to hear from a panel of experts who are familiar with the workings of revolving loan funds, which as you know, is a central part of this legislation.

For those who weren't here yesterday, we heard testimony from Mr. Jack Ravan, Assistant Administrator for Water, Environmental Protection Agency. Mr. Ravan outlined the administration's proposal on the Construction Grants Program with full funding at $2.4 billion next year and a phaseout at a reduction rate of $600 million per year for 3 years, with the program closed out at the end of 1989.

On the other hand, our proposal calls for three times as much funding, $18 billion and over 9 years. This legislation, S. 625, lives up to the 10-year funding commitment which I made when we enacted reforms to the Construction Grants Program in 1981. That is that there will be funding at the $2.4 billion level through 1991. We add an additional $3.6 billion for funding through the next 3 years, that is, through 1994.

I know some of the witnesses this morning are going to say that $2.4 billion may not be enough. But I would stress that yesterday Mr. Ravan said we could buy out the present treatment needs with the $9.6 billion in construction grants, which we have authorized in this legislation.

With respect to the revolving loan provision, the EPA study points out that if a local government receives a 2-percent revolving fund loan, rather than procuring needed funds through local bond issues, it carries a 10-percent interest rate.

In other words, if you get 100 percent at a 2 percent loan from the revolving fund as opposed to receiving a 55-percent grant with 45 percent borrowed at 10 percent that would make the total fund over a 20-year period to be equivalent to a 48-percent grant.

If the loan from the revolving fund, assume were interest free, then it would be equivalent to a 57-percent grant.

There are several suppositions in that, or facts, that we have accepted. First of all the grant from the Federal Government would be 55 percent; and second, that the balance would be borrowed at 45 percent.

I would also like to point out that States could utilize the loan fund to assist communities that have gone ahead with construction. Some communities are so low on the priority list that they may not receive funds in time to build their facilities to meet the July 1988 deadline.

Under this legislation, a community could raise money to get construction underway, then work out an arrangement whereby a loan could refinance the debt obligation and ease the financial burden on the community.

For some of you, that still may not be enough. But throughout this reauthorization, I think it is very, very important that everybody keep in mind that the President could well veto a bill which comes in at any level in excess of his proposal. Now, if that veto is sustained, then we don't have any program. That creates problems.

This bill that we have is not at the $6 billion level that the President has requested, but it is at $18 billion. That may be tempting for a veto but the question is how far can you push this? We have all heard the President's statements about, 'Make my day.' Well, I want the program to continue. I think all of us in this room do.

The Federal and State, and local governments have made great progress in cleaning up our waterways under the Construction Grants Program and we want to make sure that that progress continues.

Senator Cranston, won't you come up to the table when you are ready.

First, we will start with Senator Kasten from Wisconsin. Senator, we welcome you here. We look forward to your statement and if you are ready, why don't you proceed. Senator Cranston, if you would like to come up to the table now, we will hear you right after Senator Kasten. All right Senator, welcome, won't you go ahead?

STATEMENT OF HON. BOB KASTEN, U.S. SENATOR FROM THE STATE OF WISCONSIN

Senator KASTEN. Thank you very much. The failure to take action to strengthen the environmental protection of the Great Lakes poses a clear and present threat to human health. Congress must act in all due haste to protect the Nation's most important fresh water resource.

Let me give a few examples of this threat to human health. First, I would like to cite an 1984 study that links the consumption of Great Lakes fish to problems in human reproduction. On July 22 of last year the New York Times ran a headline saying, "Peril is seen for babies whose mothers ate fish with PCB's."

This article was based on a study of infants born to women what ate fish caught in Lake Michigan. The study concluded, that these children had behavioral developmental problems and physical problems that could be directly attributed to their mother's diet.

I would like to present the committee with a copy of that article to become part of your permanent record. I would also like to present the committee with a more technical article from the August edition of the Journal of Pediatrics.

This article, entitled "Prenatal Exposure to Polychlorinated Biphenyls: Effects on Birth Size and Gestational Age," describes, from a scientific perspective, some of the human health problems associated with the contamination of the Great Lakes. To summarize most simply, we are seeing the effects of pollution of the Great Lakes manifested today in a number of human health problems.

The problems that have already shown themselves today are not the only ones that we face from the lake pollution. Instead, we can expect to see increased incidents of human health problems as a result of the contamination of the Great Lakes. Human health problems are often predicated by appearance of these problems in animal populations. I would like to use just two examples to illustrate this point.

First, I will like to cite work done by the U.S. Fish and Wildlife Service in Green Bay, WI, one of the most statistically significant studies I have ever reviewed.

The Fish and Wildlife Service has identified an alarming occurrence of birth defects of fish eating birds in Lake Michigan. Like human beings, terns are a predator species. They are near the top of the food chain. They eat animals that have concentrated pollutions, such as PCB's, toxins, et cetera. We eat a lot of those same fish ourselves.

The problems that forester terns have today is just beginning to be understood. Unless we act, the people of the Great Lakes region, likely will suffer the same consequences.

I will just like at this time to submit to the committee a copy of testimony given to me by Timothy Kubiak of the Fish and Wildlife Service. Mr. Kubiak presented this testimony at a hearing that we conducted on this problem in Green Bay last year.

Senator **Chafee**. We will put all of it in the record.[1]

Senator **Kasten**. Thank you.

I would like, now, to illustrate that these health problems are not exclusive to species such as ourselves that are at the top of the food chain. I will like to use an example of health problems in species that are a few steps lower in the food chain, specifically fish in the Great Lakes.

Since the early 1970's, the Fish and Wildlife Service laboratory in Ann Arbor, MI, has been focusing on the effects that contaminants in the Great Lakes have on lake trout rehabilitation. The findings of this work are equally astounding.

---

[1] See p. 198.

For example, in 1980, the Service found that lake trout from southern Lake Michigan suffered a 95-percent mortality within 5 months of hatching. This compares to a 48-percent mortality for fishery stock, 45 mortality for Lake Superior and 54 mortality for Lake Huron.

Finally, Mr. Chairman, I would like to point out a third threat to human health in the Great Lakes basin. This committee is intimately familiar with the problems of improperly disposed toxic materials.

As of last fall's listing, the U.S. Geological Survey had identified that a total of 1,930 hazardous waste sites are in the Great Lakes basin. This is 20 percent of all the U.S. hazardous waste sites identified up to that time, concentrated in that very small area.

Probably the most amazing fact that I can cite today is that the Clean Water Act is mute on the problems of the Great Lakes. It is incredible that the Nation's most basic water law ignores the Nation's most important fresh water resource.

I know that there is keen interest on the committee on how to correct this shortcoming as the Clean Water Act is being reauthorized.

I will be introducing the Great Lakes Management Act of 1985. This legislation directly confronts the problems of the Great Lakes and establishes a truly basinwide program to deal with the environmental problems of the Great Lakes. In fact, several members of this committee have joined as my original cosponsors of this bill.

I would like to briefly outline the major components of this legislation. First of all, it establishes a basinwide surveilance and monitoring program. It recognizes the Great Lakes national program of EPA as the lead agency for environmental management in the Great Lakes.

It recognizes NOAA as the lead agency for Great Lakes research. It establishes a 5-year program for reducing nutrient-loading in the Great Lakes. It establishes a 5-year pilot program for demonstration techniques to present for removing toxics from lake bottoms. And finally, it requires that regular state of the lakes reports be submitted to Congress.

I hope that the committee will carefully consider the importance of a group of water bodies that were correctly named the Great Lakes. As part of its deliberation, I am sure that the committee will see the wisdom of providing the Nation's most important fresh water resource with the treatment and management that is needed.

Mr. Chairman, I thank you very much for the opportunity to appear before your committee.

Senator CHAFEE. Thank you very much, Senator Kasten, for this thoughtful testimony and indeed we will give consideration to the points that you have well made here. We appreciate your taking the time to be with us.

Senator Cranston, we welcome you. We are delighted that you have an opportunity to share your thoughts with us today.

STATEMENT OF HON. ALAN CRANSTON, U.S. SENATOR FROM THE STATE OF CALIFORNIA

Senator CRANSTON. Thank you very much. I appreciate the opportunity to testify in support of reauthorization of the Clean Water Act, and particularly the Sewage Treatment Construction Grants Program. Since the passage of the Clean Water Act in 1972, we have made substantial progress in cleaning up our Nation's waters.

California's experience clearly demonstrates the effectiveness of this program. Today, 99 percent of California's lakes meet water quality goals. In 1972, 86 percent of the State's stream miles fully supported their designated uses. By 1982, 93 percent of the stream miles fully supported their designation.

Additionally by 1982, 95 percent of the State's estuaries, and 98 percent of the ocean supported their designated use. Municipal compliance with sewage discharge permits rose from 34 percent in 1962 to 91 percent in 1982. Compliance by industries with wastewater discharge permits rose to 98 percent during this period.

This is impressive progress, especially in light of the fact that California's population increased 13 percent during this time, necessitating sewer service to an additional 2.6 million people.

But major problems remain. The State water resource board, which administrators the Sewage Treatment Construction Grants Program in California, indicates that the State needs $6 billion over the next 15 years to bring municipal facilities into compliance and meet growth needs. Enactment of the Reagan administration's proposal to phase out this program by 1990, would leave many California communities without the funds that they need.

The State of California favors continuation of the Construction Grants Program at the current $2.4 billion level. The program already reflects a significant reduction in the level of Federal funds from the 1970's. Additionally, in 1981, we cut the share of Federal funding from 75 percent to 55 percent and limited the types of projects eligible.

I question the desirability of eliminating the direct Federal grant program. Nonetheless, recognizing the Federal deficit, a program of Federal seed money to help establish State water pollution control revolving funds as proposed in S. 625 represents a workable compromise between the Federal grant program and no Federal support at all.

However, California is concerned that the timetable suggested in S. 625, continuing the Waste Water Construction Grants Program at the current $2.4 billion annual level only through 1988, then in 1989 starting the phase in of a program of Federal seed money for State revolving funds, does not allow for an effective transition. Thus I hope the committee will look favorably at a longer phase in period.

Mr. Chairman, the balance of my testimony refers to specific needs of California communities. I ask that that appear in the record.

Senator CHAFEE. It certainly will.

Senator CRANSTON. I thank you very, very much.

Senator **Chafee**. Thank you very much, Senator Cranston, for taking the time to be here with this thoughtful testimony and we will look at it carefully and bear in mind the thoughts that you suggested and recommendations.

Senator **Cranston**. Thank you very much.

Senator **Chafee**. We appreciate your coming.

Now, we will have the next panel which consists of Mr. J. Leonard Ledbetter, commissioner of the Georgia Department of Natural Resources on behalf of the Association of State and Interstate Water Pollution Control Administration; Mr. Charles Kaiser, general counsel of the Metropolitan St. Louis Sewer District on behalf of the Association of Metropolitan Sewerage Agencies; Hon. Ted Lehne, councilman from Fairbanks, AK, on behalf of the National League of Cities; and Mr. Jerry Smith, manager of the Montecito Sanitary District in Santa Barbara on behalf of the California Association of Sanitation Agencies.

Gentlemen, I will ask each of you to present your testimony and then we will have some questions for you as a group.

All right, Mr. Ledbetter, we welcome you here. We look forward to your testimony.

STATEMENT OF J. LEONARD LEDBETTER, COMMISSIONER, GEORGIA DEPARTMENT OF NATURAL RESOURCES, ON BEHALF OF THE ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS

Mr. **Ledbetter**. Thank you, Mr. Chairman. We appreciate the opportunity to appear before your committee to comment on the reauthorization of the Clean Water Act. My name is J. Leonard Ledbetter, commissioner of the Department of Natural Resources of the State of Georgia. But today I am here as vice president of the Association of State and Interstate Water Pollution Control Administrators to represent the views of the states on the reauthorization of the Clean Water Act.

Please allow me to introduce Miss Robbi Savage, our executive director who prepared the written testimony that was previously submitted to you, with input from our State members across the country.

As you know, she and her staff are here on Capitol Hill and available to you and your committee as well as our staff in following up on any information that we can provide to clarify or respond to any questions that you or the members of your committee or your staff may have.

Mr. Chairman, I would like to commend the subcommittee and you, as the chairman, as well as the full committee, for the bold and innovative approach that you have set forth in S. 652, as well as the leadership that you have provided over the years as far as moving us towards the goals of the Clean Water Act.

We think that you have outlined a very realistic approach as far as the concept of transitioning the grant program to a loan program over a period of time. I would like to make a few comments on that but in the interest of time, may I request that you make our written testimony a part of the record of the hearing so that I can just touch on a few highlights?

Senator **Chafee**. Yes, we would be glad to do that.

Mr. **Ledbetter**. Thank you, sir. You should have before you this morning, a one-page summary of our highlights. If I may direct your attention to that one page of our highlights, then I will be very brief in the points that I would like to make.

Senator **Chafee**. Well, let's make sure we have that one page. I have your statement here.

Mr. **Ledbetter**. That's it.

Senator **Chafee**. All right. Go ahead, Mr. Ledbetter.

Mr. **Ledbetter**. Thank you, Mr. Chairman. As I mentioned, the points that I would like to make are all contained there on that page.

At the top of the page there is a summary of our organization, who we represent. The second paragraph emphasizes that we had a midwinter meeting here in Washington in February at which time we discussed the concept that you have outlined in S. 652 and the consensus of all the states was that we like this concept.

We think that it provides for realistic implementation of the concept of transitioning to a loan program and enables us to move forward with the realistic phaseout of this program as far as the Federal budget is concerned.

As I mentioned, we think it is innovative and a bold approach and we appreciate you sponsoring the legislation. We have a few suggestions, that we think would provide incentives. Many of the States may be somewhat reluctant to move forward expeditiously with this concept.

My own State already has this concept in place. We are moving forward with it with some State funding. But other States still must get legislation, in some cases maybe even requiring constitutional amendments, so a realistic time period is needed as well as other incentives.

Particularly, we would recommend you not require a State match for a couple of reasons. No. 1, there is no required State match under the current grant program. There is no State matching concept in place across the country among the States. Many of them have their own State grant program with the various types of authorization involved with that.

The States also must for the most part maintain balanced budgets. So in a given recession or slow down, which we can't predict 5 years away, a State may not able to fund their match in a given year. This could preclude some State from receiving funds for this most important program. So we would urge you to take another look at mandating a match on the part of the States.

I am very optimistic that many of the States will do the same thing that we are doing in our State. Currently, we are providing more than 15 percent of State funds into both a State grant and a loan program. If we were forced to, year by year, put a match into place, we are very concerned that in a given year, due to a recession or slow down in the economy, a State would not qualify for funds because they could not provide a match and the Clean Water Program would be disrupted. So we would ask you to look at that.

Senator **Chafee**. Let me just comment on that. You are talking about the 15 percent?

Mr. **Ledbetter**. Yes, sir.

Senator **Chafee**. That seems so modest. Also, as far as the time to get with it, your first contribution wouldn't be required until 1989. Did you mention earlier that the legislatures would need some time to get adjusted?

Mr. **Ledbetter**. I think that needs to be looked at, as Senator Cranston pointed out. In our own case, we started over 3 years ago and we had legislation put into place to commence a revolving loan program in Georgia.

We thought we were ready to go. Governor Harris had provided a process to provide $30 million in general obligation [GO] bonds. The State supreme court ruled that the constitution only authorizes the State to do that for State-owned water and wastewater systems. Consequently, we had to go back to the drawing boards. And we find ourselves needing at least 4 years to implement the process in our State.

You have these unpredictable situations, like the constitutionality in many States. We had put the Georgia program into place on the advice of the attorney general and yet, as you well know, the courts will differ. So in our case, it is going to take at least 4 years.

Fortunately, we are already to the point where we will be well along with the program by the time this legislation could be effective. But I point that out because I would suggest that there may be other States that could encounter many of the same difficulties that we experienced.

As far as we are concerned, in my own State, your schedule is certainly acceptable. But I want to caution you, as did Senator Cranston, that it may take considerable time for this concept to become fully operational.

Senator **Chafee**. All right. Why don't you go on to your next point.

Mr. **Ledbetter**. There are other incentives that I would like to mention. The States are going to need as many incentives as possible. In one sense we agree with you that 15 percent is a modest amount. But, again, in a given year, some States might not be able to come up with a mandated match.

On another point, the present language requires quarterly release of the funding and yet the legislation says that we must move the money in 1 year. While we agree with the 1-year approach because we do need to move the money expeditiously, we would urge that the language be changed to provide the funds at the beginning of the Federal fiscal year. We may run into trouble moving that last quarter's funding and hence, the probability or possibility exists for a State to lose funding or fail to qualify for funding.

Finally, on repayment of the funding from local governments back to the revolving fund. We would like clarification in the language that those funds can be used for meeting the needs identified in section 216 of the act which, of course, would be broader than the core needs that we would be required to fund the first go-around.

Now, we agree with the concept in your bill that we should go right down the priority funding list, funding the core needs on our current priority system. But, we would like for it to be very clear in the language that when we get involved with the repayment of those funds in future years, States can use those dollars for all the needs that are now set forth in section 216 of the act.

Senator CHAFEE. All right.

Mr. LEDBETTER. Now, in addition, our organization would like to urge some changes to S. 53. We urge that the committee move forward with S. 53, but, we would like to suggest some changes. The first being section 106(a) of S. 53. We request it be rewarded to "Allow narrative or numerical criteria in water standards for toxics."

Our organization, ASIWPCA, supports a very strong and aggressive toxic program. We have developed a position that has received widespread attention. We have held national conferences for the States on the subject and we are very supportive of dealing expeditiously with toxics. We do not, however, have numerical criteria on many of the pollutants that many of the experts can agree to. Because of the inherent difficulty of reaching a scientific consensus, we prefer language that provides use of bioassays or biomonitoring without numerical criteria in every case.

So we would like to see some narratives that would say we can use bioassays, biological monitoring, et cetera, whereas now the bill says, "That we shall use numerical criteria." We would like to be able to use narrative or numerical.

Senator CHAFEE. OK.

Mr. LEDBETTER. The next issue I would mention is section 107. We request that section 107 be expanded to authorize continuation of existing pretreatment programs that are in place and working. Many pretreatment programs in the country are working very effectively at the present. If they are doing the job, we would recommend that they not be disrupted.

We would ask that section 108 of the act be looked at more closely regarding EPA's independent action. Most States do support the concept of civil penalties, administrative orders, et cetera, for EPA. But, Mr. Chairman, you are probably aware that we have had, over the last 20 years, different administrations from time to time being under pressure, as they should have been, from environmental groups and others, to take action. So we have seen various edicts go out from the U.S. EPA headquarters to the regions, taking enforcement action in the States.

If the State is doing the job, and being effective in carrying out the program, we would urge that language be put in this section specifying that EPA cannot come in and levy actions, civil penalties, and/or administrative orders independently. This will be disruptive because it puts the municipal officials and industrial officials in double jeopardy. Permittees will be unable to solve the problem and move ahead with negotiation, litigation, or settlement at the State level. They will never know if that is the end of the ball game, or some later date, there will be a Federal agency taking action, as EPA with their own independent action.

This would be very disruptive. We would find industry and local officials very reluctant to settle with the State. Instead they would tend to procrastinate, waiting to see what EPA is going to do.

ASIWPCA would ask that you adopt language indicating that if the State is taking or has taken effective action, EPA is not authorized to do so.

We are supportive, however, of U.S. EPA having the leverage they need in those States not carrying out the program. If the State is not doing the job, it reflects on all of the rest of us. So our members are——

Senator **Chafee**. You have one more minute, Mr. Ledbetter.

Mr. **Ledbetter**. All right, sir. Thank you, Mr. Chairman. Two other points that we would ask you to consider under S. 53: Section 112(a), needs to be amended to authorize the use of, more clearly, of existing information for nonpoint source management programs. We would also ask that you consider amending section 502 of the Clean Water Act to require permits for storm water runoff only when determined as needed to protect designated water use or when associated with industrial discharges.

As you know, recent court actions requires that we permit every parking lot with storm water runoff in the country. That is not a wise use of our limited resources.

Finally, I would just point out that the items that I have listed at the bottom, we think are elements of S. 53 and S. 652 that will enhance the clean water program of this country.

We commend you and the subcommittee for including those provisions consisting of 106 State management grants, the $18 billion that we have already talked about for transitioning to revolving loans, the delegation of partial approval of the NPDES permit programs and 10-year permits under certain conditions.

We agree with your language that would mandate the permits be reopened. We are very supportive of that concept. We think a 10-year permit is only workable and realistic as long as it is understood that the States will be mandated to reopen when there are new effluent limitations.

Thank you, sir, for the opportunity to make our comments.

Senator **Chafee**. Thank you very much.

Mr. Kaiser.

STATEMENT OF CHARLES KAISER, GENERAL COUNSEL, METROPOLITAN ST. LOUIS SEWER DISTRICT, ON BEHALF OF THE ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES

Mr. **Kaiser**. Thank you, Mr. Chairman.

I have condensed this from our official statement but what I am going to say is basically the first four or five pages. I will read it in the interest of the 5 minutes.

Mr. Chairman, I am Charles B. Kaiser, Jr. I am here today representing the Association of Metropolitan Sewerage Agencies for whom I serve as chairman of the legislative committee. AMSA member agencies serve more than 8 million people in 97 urban areas which collectively provide services to 50 percent of the Nation's sewered population.

These agencies range from the city of Los Cruces Utility Division, serving 50,000 citizens to the New York City Department of Environmental Protection, serving more than 8 million citizens.

I am also the assistant executive director and general counsel of the Metropolitan St. Louis Sewer District. In addition, I am also very honored today to be representing the U.S. Conference of Mayors, which is composed of the nation's principle cities.

AMSA and the Conference have worked jointly in recent years to ensure fair and sensible implementation of the Clean Water Act for all cities. To AMSA and conference members, the central issue of these hearings is the Construction Grants Program. Consequently, my testimony today will concentrate on our concerns in this area.

The 1988 secondary deadline is fast approaching. Budget cuts in domestic programs will make it difficult to secure revenues and public support for clean water projects. The Federal program to assist our efforts is again up for review within the context of limited resources. But we can do what we need to do, if you will support us.

We understand the difficult choices you are now considering. Recognizing these constraints, our testimony today offers some options to achieve further progress in meeting the goals of the Clean Water Act. These are our basic objectives in designing an approach to deal with current conditions.

One, to preserve momentum to secure maximum environmental gains; to minimize unnecessary disruptions in the program; to assure the largest return for remaining Federal dollars; and finally, to ensure that communities now ready to comply with deadlines have an opportunity to do so. Any proposals which you consider we hope will be evaluated against these principles.

Equally important, existing law must be retained to continue the current grant program to fund these projects already underway and those now ready to go to construction. If you shift the financing mechanism in midstream, you undercut the real circumstances governing how many of these projects were developed, including the financing structure to support them.

Most urban projects have financing plans that were developed contingent upon numerous interlocal agreements between the wastewater agency and the local governments it serves. A shift in financing would result in reopening these agreements and in many cases, court suits, thus substantially delaying the environmental benefits associated with completion of these projects.

Beyond funding for existing projects, already under way, AMSA would propose two options: To fund those projects which are ready to go to construction and are tied to the enforceable requirements of the act; or to specifically target the fund to projects serving the greatest number of people and yielding the maximum environmental benefits.

The first option would allocate funds to each State based on needs in two major categories: Total costs to complete those projects already underway and cost for mandated projects that are ready for construction at the beginning of each fiscal year and intimately tied to water quality goals.

Mandated costs are the total costs of facilities and systems needed to comply with the requirements of the act regardless of category eligibility. Grants should be awarded on the same basis. The allotment formula should also give consideration to the needs of communities where secondary waiver application has been denied. These systems have never had an opportunity to receive funding consideration and as a result they may soon be applying for grant assistance for the first time.

This option should also include a provision which gives priority to those projects that do not receive grant commitments during the first year of special eligibility.

The second option is to target funds directly to urban areas. Under this approach, the Federal Government specifically directs grants to purchase the maximum return for each dollar made available.

Targeting funds to those regional systems serves more than the largest cities. For example, our metropolitan St. Louis Sewer District serves St. Louis and 90 other municipalities. Chicago MSD serves Chicago as well as 122 other industries. Seattle Metro serves the city of Seattle and 22 suburban communities within the agency's service area.

The Hampton Roads Sanitation District serves Virginia's two largest cities, Norfolk and Virginia Beach and seven other cities and three counties. The Nation's largest cities as well as hundreds of smaller suburban localities will be fully in compliance within the next 7 years.

Both options that I have discussed rely on continuing grants, not loans, at a level of 2.4 annually in existing grant funding over the next 4 to 6 years. This would significantly fulfill the objectives of both approaches.

Let me add a further comment on the loan concept. We support the loan program for addressing future needs. Those beyond reaching the enforceable requirements of the Clean Water Act.

Throughout the balance of the written testimony, we have addressed other issues of concern to AMSA members, but will not state it here in this record.

In closing, we, in AMSA, feel that in 1981 the Construction Grant Program took a significant reduction from $5 billion to $2.4 billion and this year the Federal grants will be reduced from 75 percent to 55 percent and no grants for future growth.

As the President said, growth is what is going to save our economy. This requires considerable more local funding. Please, let's not further cripple the program that has accomplished so much in restoring the waters of our Nation. If we continue the program a few more years, we can finish the job.

Mr. Chairman, I am from St. Louis and we have a famous brewery there that has a slogan, "When you have said Budweiser, you have said it all." And in your introduction to your bill, S. 652, I think you said it all when you said, "Most importantly, the bill lives up to the 10-year funding commitment made when the 1981 amendments were passed."

I think we can go ahead with the grant program. I don't think we can start a loan program next year. We will lose too much momentum.

I really feel that between your bill and Senator Stafford's bill, I think the bill that was introduced by you, Senator Stafford, Senator Bentsen, and Senator Mitchell, can get the job done.

Senator CHAFEE. Mr. Kaiser, as the Budweiser ad said, "When you have said it, you have said it all."

Mr. KAISER. I think you are right.

Senator CHAFEE. I think we better get on to the next witness. Thank you.

Mr. Ted Lehne.

STATEMENT OF TED LEHNE, COUNCILMAN, FAIRBANKS, AK, ON BEHALF OF THE NATIONAL LEAGUE OF CITIES

Mr. LEHNE. Thank you, Mr. Chairman. I am afraid we don't brew beer in Alaska, so I won't have any of those slogans.

My name is Ted Lehne. I am a member of the city counsel and deputy mayor of Fairbanks, AK. I am also a member of the National League of Cities' Energy, Environment and Natural Resources Steering Committee.

I am here today to testify about the Wastewater Treatment Plant Construction Grants Program, on behalf of NLC and the 15,000 cities we represent, ranging in size from New York City to Scotland Neck, NC.

First, Mr. Chairman, we are not here as local governments asking for Federal assistance to solve a local problem. Rather than, we are local governments offering to help the Federal Government solve a national problem.

The Nation's waters don't respect political boundaries. They flow from city to city and from State to State. The actions of any one city or any one State may adversely impact many Americans living in many cities and many States.

Clean water is recognized as a national priority, one which all of us, city, States, and the Federal Government should be willing to work on.

But the National League of Cities believes that the Federal Government has an obligation to continue its participation in the successful Construction Grant Program and to reject efforts to phase out such assistance until we have achieved our goal. Clean water for all Americans has been and should remain a national commitment.

This issue is a broad concern to cities from the largest to the smallest. The problem of achieving compliance varies according to a cities's size. For the Nation's large cities, the New Yorks, the Bostons, the costs are immense and the technologies complex.

Facilities costing in the billions of dollars, requiring complicated technology and broad interjurisdictional agreements are understandably slow in getting authorized. Some are just now crossing the last hurdles at a time when there is talk of ending the program.

The medium-sized cities have different obstacles to comply with the law's requirements. A condition of receiving a Federal grant for many of these cities is that the facilities serve many of the surrounding communities as well, which is an approach which we consider appropriate.

But regionalizing a wastewater treatment program means negotiating rate setting agreements and allocating financial responsibility for the local share of costs among the many participating jurisdictions. For the smaller cities, especially those that are remote from the most populous areas of the State, the problems with constructing a wastewater treatment plant are almost insurmountable.

Essentially, the Nation's smallest cities have very limited access to the bond market and regardless of the local match requirements, are often unable to finance the costs of constructions. While the cost of a plant for a small city is not large, the cost per capita is often very high. As a result, frequently, they place low on a State's priority list.

The smaller facility also loses economies of scale, resulting in a high cost per thousand gallons of water treated. That means high user charges that discourage voters from approving the bonds necessary to build plants that must be built to comply with the law.

The population residing in small rural areas and the inner cities are also frequently the least able to pay such high user charges if the plants are built.

All cities, regardless of size, are part of their State's priority setting process. States can establish priorities for funding treatment plants on a variety of criteria such as serving the greatest number of people or having the greatest impact on the environment. But these objectives are not necessarily coterminous.

In a large city, such as Boston, the cost of constructing a wastewater treatment facility to deal with its problems is estimated to be at least $2 billion. Yet the State of Massachusetts receives about $83 million annually of 201 money. For some in Massachusetts, the Boston facility seems an impossible candidate for the State's priority list. Even though it would serve a significant percentage of the State's population.

In contrast, in my State of Alaska, Pelican, a city of 600, requires a facility costing $1.3 million to comply with the act. Given a 55-percent Federal grant, that city of 600 would have to come up with $600,000 or $1,000 per person just for the cost of construction.

What would be the consequences of federal withdrawal from financial participation in the program? We fear that many needed plants would not be built. The surpluses that the treasury maintains exist at the State and local level are simply not there. At the State level, 16 Governors have indicated their intention to raise State taxes this year.

My own State of Alaska faces a $300 million to $500 million deficit for the fiscal year end being this June 30. Even if the State should have a surplus, we are told it would be used to compensate for reductions in support of operating programs.

For fiscal 1986, the Senate Budget Committee has proposed to reduce general revenue sharing by 50 percent, public transportation assistance by 25 percent, community development block grants by 25 percent, housing assistance by 10 percent. This is after cities have already taken cuts of over 50 percent in urban programs over the last 5 years.

Senator CHAFEE. Mr. Lehne, your time is running out. It has run out. If you want to summarize, this would be an appropriate time.

Mr. LEHNE. Thank you, sir. I would just say that our position is to continue Federal financial programs to give the States an opportunity or the flexibility to determine how much of their allocation to use as grants or loans.

The targeting of funds should be left to the States and while it is not within the jurisdiction of the committee, the Congress should reject efforts by Treasury to reduce the local ability to raise funds in the bond market.

I would ask that the balance of our prepared testimony and the letter from Mr. Beals to Senator Stafford, dated March 4, which is attached to my testimony be included in the record.

Senator CHAFEE. Well, thank you very much. We appreciate your being here, Mr. Lehne. You are certainly the long-distance witness.

Mr. SMITH.

STATEMENT OF JERRY D. SMITH, MANAGER, MONTECITO SANITARY DISTRICT, SANTA BARBARA, CA, ON BEHALF OF THE CALIFORNIA ASSOCIATION OF SANITATION AGENCIES

Mr. SMITH. Thank you, Mr. Chairman. My name is Jerry Smith, and I appear before you today as the president of the California Association of Sanitation Agencies, or CASA, in order that you might understand a little better just who we are and what CASA is about.

Please let me give you a little background. The foundation to CASA was built in the late fifties when a number of northern California sanitation agencies met to discuss their common problems and share their experience and expertise.

Now, after 25 years, CASA includes 83 public agencies serving over 12 million California residents and associated industrial and commercial users. Our membership includes the elected directors, the staff members and consultants of public agencies from all sizes. From the large agencies like Los Angeles County Sanitation District, which serves over 4 million people down to small districts such as mine, the Montecito Sanitary District with 10,000 residents.

Over the years the scope of our involvement has broadened to include a very active and constructive participation with our State legislators and regulators and this year we have also decided to become more active at the Federal level.

Therefore, on behalf of CASA, Mr. Chairman, I thank you for this opportunity to present our views on the needs to reauthorize the Clean Water Act, an excellent program that we, in California, believe to be vitally necessary in our efforts to protect the environment and public health.

Mr. Chairman, I would like to submit for the record the complete text of my remarks. But just now, I would like to focus on three critical clean water issues.

Senator CHAFEE. Fine.

Mr. SMITH. First the basic issue of funding. In 1981, Congress significantly reduced the authorization level for funding construction grants from $5 billion to $2.4 billion per year and limited the eligible uses of construction grant funds. Congress at that time also reduced the Federal share of project costs from 75 to 55 percent.

At the same time you recognized the need to bring stability to the program to avoid creating inefficiency in planning and constructing wastewater facilities. At that time you also made a commitment to provide funding for the Construction Grants Program through the year—through the end of the decade.

As a first step in that commitment, you authorized $2.4 billion per year through fiscal year 1985. We urge you now to continue this commitment and reauthorize the Construction Grants Program at a minimum level of $2.4 billion per year through at least fiscal year 1990.

Many of California's remaining needs are for small communities. These smaller communities did not have the resources to mobilize the construction activity when the program was in its early stages and we believe it would be most unfair to eliminate or modify the existing Construction Grants Program in the near-term, which would create gross inequities for the smaller communities trying to comply with the Clean Water Act goals.

If Congress intends to phase out or eliminate the Grant Program before all the water pollution control needs of our Nation are addressed, then we recommend that Congress begin the transition by committing to a leadtime that does not impinge upon these communities plans that were based on construction grants funding through 1990.

Specifically, we recommend that you appropriate funds beginning in fiscal year 1986 to capitalize on a loan fund that would parallel the Grant Program. Any loan programs success depends on the ability to finance the project at the lowest possible cost. We know that administrative guidelines are a necessary element of any program to ensure that it is successful.

However, if these guidelines become overly burdensome, the prospect of successfully negotiating a financially sound loan package may become extremely difficult.

Senator CHAFEE. Would you just explain what you mean by capitalize a loan fund that would parallel the Grant Program? What do you mean, have it continue at the $2.4 billion for the grants and then have a loan in addition to that loan program?

Mr. SMITH. That's correct, Mr. Chairman, to begin the transition earlier so that the impact, particularly on smaller communities, is less significant.

Senator CHAFEE. I am not sure what you mean there. You want the loan program to be added on top of the grants program?

Mr. SMITH. Yes, sir.

Senator CHAFEE. And keep the Grants Program at $2.4 billion.

Mr. SMITH. Through the year 1990.

Senator CHAFEE. In other words, you want more money.

Mr. SMITH. Yes, sir.

Senator CHAFEE. OK.

Mr. SMITH. CASA strongly supports the language in S. 652 which provides that all funds are to be used for wastewater treatment needs. We believe that the States and local agencies should have the maximum latitude to determine how fund dollars may be used most efficiently.

Mr. Chairman, the next two issues may be concerns that you will not hear about from anyone else today, but they are serious issues in California and we expect they could become national concerns.

First, the matter of auditing construction grant programs. Over the past several years, CASA members have been subjected to extensive EPA audits of their projects. Please understand that CASA firmly supports the audits program to ensure that there has been no waste, fraud, or corruption in the Grants Program.

But the audit reviews that they have been subjected to have gone well beyond this worthy objective and have included auditors second-guessing the eligibility, the reasonableness or the necessity of project costs which have previously received EPA or State approvals.

This audit review second-guessing became a serious problem in California as early as 1980 and we expect it to spread throughout the Nation as the backlog of projects begin to receive their final audits.

In recent years, we in California have witnessed a consistently high level of POTW's appealing the final audit determinations. In 1984, that percentage was 35 percent. In most cases, these appeals have ultimately been resolved to the satisfaction of the POTW, which is an indication that the audits were misdirected.

To illustrate this point, I have included in my written testimony the results of a survey of 10 recently resolved audit appeals.

Senator CHAFEE. Mr. Smith, your time is up. Why don't you take 30 seconds to summarize.

Mr. SMITH. Thank you, Mr. Chairman. That survey showed that the initial appeals resulted in a recommendation to disallow 17 percent of the cost after we completed the costly appeal process. The final determination was 2 percent which was a dramatic reduction from the initial 15 percent—17 percent.

The final issue that I would like to just raise for your awareness, Mr. Chairman, is the matter of liability. Just within the last 2 weeks, many of our California agencies have discovered that it is impossible to obtain liability insurance for such liabilities that we call, "Sudden and accidental releases," that is explosions or perhaps chlorine gas releases.

The industry simply will not insure us. We believe that this is a result of action directed against cities which will have an impact on public agencies and possibly severely jeopardize the investment of both State, and Federal, and local funds in these projects.

Senator CHAFEE. Well, that is a good point. I have not heard that one before. We will certainly look into it.

Thank you, gentlemen. I have a couple of questions.

What you are saying, Mr. Kaiser, is that there be targeting. In other words, that we here in the Federal Government target some of these funds toward your constituents in AMSA.

Mr. KAISER. I think what I am saying is what I have said for years, most of the large agencies have had to sit back and wait because—in my State, we had Kansas City and St. Louis, so they would do a project and we would do one. In the meantime the most of the rest of the State got it.

All I have said since this act was passed, if Missouri gets its funding based on St. Louis, 90 cities' populations and needs, there ought to be some way—now we have got an administrative order and we are getting a lot of heat to do the last project, even though we have doubled our area and taken a lot of other problems. I think that the State ought to have to give that money out that way.

Senator CHAFEE. Don't you think it is a little difficult for us to sit up here and say where the money is going to go? We give it to the States and presumably the States exercise their best judgment and set forth the priorities.

Mr. **Kaiser**. There is no coordination and I have heard it more and more, not from a Senator or a Congressman, but I sure hear from EPA: "Get on with it. We don't care if the State gives you a low priority for that job. You are not going to get any Federal money but get on with it quicker."

And they are not picking—I think the gentlemen on my left who said if you are going to let the States give out your money, then let them bring the prosecutions against the local agencies because there is no rhyme or reason between the way EPA is starting to enforce and going after the biggest—and I don't see them going after too many littles—who are getting the money.

So that is what we are trying to say, if there could be a little coordination between enforcement and who is getting the money in the State. And remember, Missouri is getting that money based on our needs and I think we can work with the State but that is not who is coming after us with these big fines and "Get it all done tomorrow without Federal or any other kind of grant."

Senator **Chafee**. I notice in your testimony you said you would be satisfied with the 6 years at the current funding.

Mr. **Kaiser**. We said 4 to 6 and I think——

Senator **Chafee**. Well, we'll give you 6. That is 6 times 2.4, that gives $14.4 billion. When you say "we," you are talking about——

Mr. **Kaiser**. AMSA.

Senator **Chafee**. AMSA.

Mr. **Kaiser**. Yes; we realize the problem. We also realize that——

Senator **Chafee**. What you are saying is give AMSA, give the big cities——

Mr. **Kaiser**. No, no, no, no, give the program.

Senator **Chafee**. In the program we have $18 billion. Are you saving us $3.6 billion this morning?

Mr. **Kaiser**. No; I think we go with your transition or the program in its transition 5 years from now.

Senator **Chafee**. I guess my specific question is if you are satisfied with $14.4 billion, you must be very satisfied with $18 billion. Is that right?

Mr. **Kaiser**. Yes, if we get some of it.

Senator **Chafee**. Well, we can't determine who is going to get it. All we do is give it out to the States. But you are not just speaking for AMSA, are you, when you say that you will be satisfied with $14.4? You are not saying that you want all that to go to AMSA, are you, or aren't you?

Mr. **Kaiser**. I think if you read our whole statement, we are saying if we could get the grants——

Senator **Chafee**. Who is "we" now?

Mr. **Kaiser**. All of the program for 5 years, the program will be a success. Then convert it to the loan program for things not enforceable under the act, so EPA won't be out there suing you. Then I think your program is pretty sound.

We are probably asking for 1 more year of grants, minimum. In other words, instead of 1988, 1989, we would go to 1990 with grants and then phase the program out through a loan program.

Senator **Chafee**. All right.

Mr. **Smith**. Mr. Chairman.

Senator **Chafee**. Yes.

Mr. **Smith**. If I might point out that in California we have had very good experience with the States establishing that priority system and interruption of that program now would just cause delays that I think would result in delaying the construction of the facilities that we need.

Mr. **Ledbetter**. Mr. Chairman, may I add one quick point to that as well.

Senator **Chafee**. All right.

Mr. **Ledbetter**. In my State of Georgia the AMSA members received most of our construction grant funds. So it is related to the use of these funds to protect the receiving waters, the impact on water quality, et cetera, across the country. That is basically the goal of the act, to get on with cleaning up the most waters as fast as we can. If we start trying to target the money to a few large systems at this point in time, it will be very disruptive.

So we would, as I said earlier, like to see the option of transitioning to loans in those States that can, right away, and mandate it at some future time that is reasonable. Thank you.

Senator **Chafee**. Well, I don't think you will find much enthusiasm in this subcommittee for targeting.

Mr. Ledbetter, on the 10-year permits, I will be interested in the comments of the others.

What we have in here is 10-year permits with mandatory reopeners based on new information on toxic pollutants. Some have said that these reopeners could become meaningless because the States don't have the resources to handle this. So there is a lot of opposition to the 10-year permits.

Do you agree with the position that the States are not apt to reopen the permits in order to write stronger standards but will just string along and wait until the 10 year period is up and then include the stronger requirements at the end of the time? What do you say to that?

Mr. **Ledbetter**. No, sir; I don't agree that the States will string along at all. I think that the 10-year permit is very necessary for us to be able to focus on what we are trying to do. We have numerous, very small permits, small communities, that do not have any toxics.

We could issue permits then for the 10-year period which will require reopening the permit if USEPA promulgates effluent limitations or a water quality problem develops in the receiving waters. That will enable us to use our State staff to prepare better permits for major permits and especially for those with potential toxic pollutants.

We encourage and support the language you have in the bill that mandates that we reopen. We have no problem with that.

The other point is that we have recently looked at information with EPA on how many States have a backlog. You keep hearing about that. We have 38 States that have been delegated the NPDES program now. I think there are only about eight that have a backlog of any significance.

Senator **Chafee**. OK. Do you want to finish up?

Mr. Ledbetter. What I am saying is that the 10-year permit enables us to be more effective as environmental managers, because we will put our resources then on the ones that have toxics. We support reopening and we like the language that you have.

Senator Chafee. Any of you gentlemen have any thoughts on that?

Mr. Kaiser. I think we agree with you.

Senator Chafee. You will like the 10-year permit?

Mr. Kaiser. With reopening.

Senator Chafee. With reopening.

OK, gentlemen. We thank you very much for coming here. This is helpful to us. We will be referring to your testimony as we go along. Thank you.

The next panel consists of Mr. Tom Boast, limited partner, Bear, Stearns & Co., in New York; Mr. E.B. Ransom, executive director, Ohio Water Development Authority; and Mr. Kermit Prime, of Boyle Engineering in Orlando on behalf of the National Society of Professional Engineers.

Gentlemen, why don't you come up, with Mr. Boast over here to the left as you face me; Mr. Ransom in the middle and Mr. Prime over on the right. Mr. Boast over here.

All right, Mr. Boast, why don't you proceed. Welcome.

STATEMENT OF THOMAS J. BOAST, LIMITED PARTNER, BEAR, STEARNS & CO., NEW YORK, NY

Mr. Boast. Thank you, Senator Chafee, for the opportunity to present our remarks. We have prepared written testimony by Joseph M. Giglio, general partner and manager of the public finance department at Bear, Stearns. We ask that this testimony be inserted in the record. I will summarize as briefly as possible.

Bear, Stearns & Co. was involved with the development of the proposed New Jersey infrastructure bank. The subcommittee should be commended on the development of S. 652. It corresponds with the revolving loan fund concepts that are being developed, and discussed, and implemented in many States across the Nation.

In general, revolving loan funds have four goals. First, leveraging resources. Second, stability and continuity of funding. Third, minimization of costs borne by localities, to the extent possible. And fourth, reduction of a State's reliance on its own credit, in order to preserve State credit for other types of infrastructure and capital investments that are less conducive to user fees and public pricing strategies.

I would like to make a few specific comments on provisions in S. 652 by drawing upon our experiences in a variety of States.

We note that S. 652 would give States the option to begin putting Federal resources into revolving loan funds beginning in Federal fiscal 1986 and would require that a State deposit into the loan fund State resources equal to 15 percent of the Federed capitalization grant, beginning in 1989. To the extent that States are ready to use Federal moneys in these new ways or States are ready to use State moneys in these new ways, the committee might consider giving credit for any State-matching money put into a revolving loan fund during the 1986 to 1988 period, prior to the requirement that the Federal money go in. As a result, if a State is taking the initiative to step forward putting State money into a loan program for a few years before the Federal money must go in, then those State resources could satisfy the later matching requirement.

It may be a way to minimize some of the difficulties that were mentioned earlier this morning.

Senator **Chafee**. What you are saying is let the States start putting their money in before the requirement. That they put in the 15 percent and that the amounts that they put in in advance be used as a credit against the 15 percent when it is finally due?

Mr. **Boast**. Yes, sir; the early State contributions could count against later required matching requirements, once Federal money begins to be placed into a State revolving fund.

Our second comment relates to the provision in section 603(d)(3) that would allow States to choose to put Federal money into a revolving fund but, using it for direct loans, a State would use it for debt reserves.

There could be a potential problem with some of the language in section 602(b) (4) and (5), as we read it, which requires that all funds in the revolving fund be committed in an expeditious and timely manner. The problem might arise if a State were to place Federal moneys into a debt reserve, which would help to assure leverage of the State revolving fund. This use of funds seems to be contemplated in section 603(d)(3). Perhaps the language in section 603(b)(5) could be rewritten slightly to include in the committed concept use of Federal money for a debt reserve as well as a loan. Again, this language would allow a State to institute the option of using the Federal moneys as reserves.

A third comment we have is that the conditions and requirements associated with making loans appear reasonable. One of the primary interests of State administrators, as well as the EPA and the Congress, in establishing a loan program would be to ensure that loan repayments are in fact received back into the revolving fund. That is one of the obvious goals of the program.

Therefore, it would be desireable to specify in S. 652 some fairly minimum standards for loans. For example, that loan recipients establish rate covenants. And that loan repayments may not necessarily go into the revolving fund itself, but instead into debt service funds that would be maintained by independent parties. And that deficiency agreements could provide security that, if sufficient user fees are not collected, then a deficiency agreement would provide recourse to local taxing power to retire the loan repayments.

These types of provision are very normal for local financing efforts and it would be important that S. 652 recognize that there could be State variations among them. The language should be very general, I think, so that one State in the Northwest for instance, is not constrained by Federal Code language that perhaps would be applicable to the State of Georgia.

You heard this morning about the difficulty in Georgia. This problem may or may not be present elsewhere. Therefore, any Federal statutory language should be very general, but it should clarify, I think, that Congress is intending that loan repayments go back to the State revolving fund.

I would be happy to respond to any other questions.

Senator **Chafee**. All right, fine. Thank you very much, Mr. Boast.

Mr. Ransom.

STATEMENT OF E.B. RANSOM, EXECUTIVE DIRECTOR, OHIO WATER DEVELOPMENT AUTHORITY, COLUMBUS, OH

Mr. **Ransom**. Thank you, Senator. I am the executive director of the Ohio Water Development Authority.

Senator **Chafee**. First, Mr. Ransom, I want to welcome Senator Lautenberg here.

Senator, if you have a statement, we would be glad to have it now. If you want to submit it for the record.

Senator **Lautenberg**. I have no opening statement.

Senator **Chafee**. All right.

Senator **Lautenberg**. We are interested in the witness' testimony. We look forward to discussing the problems with you.

Senator **Chafee**. Fine.

All right, Mr. Ransom, why don't you continue.

Mr. **Ransom**. I am the executive director of the Ohio Water Development Authority, the State agency created by statute by the General Assembly of the State of Ohio in 1968.

My remarks will address the revolving fund concept. In August of 1969, the general assembly appropriated $100 million from the proceeds of a voted bond issue as seed money for what can be legitimately described as a State revolving fund for sewer facilities.

Following the appropriation of the $100 million, the authority undertook its first 5-year program, entitled "the Pollution Abatement Program."

Initially, the authority loaned the $100 million appropriated to it to local communities for sewerage system improvements, eligible for grants from EPA and its predecessor, the Federal Water Pollution Control Administration, pursuant to section 8.

Following the lending of the original $100 million, the authority then issued bonds, pledging the pay-backs from the loans made from the $100 million and from the loans which were subsequently made from the proceeds from such bonds.

Over the 5-year period, the Pollution Abatement Program, which ended on December 31, 1974, the authority financed 218 projects, totaling approximately $600 million.

The Clean Water Program was then undertaken on January 1, 1975, and extended for the 5 years ending December 31, 1979. It totaled 45 projects with a dollar value of approximately $400 million.

The Clean Water Program was expanded to include water supply and distribution facilities. The surplus paybacks from the Pollution Abatement Program were used to support the Clean Water Program.

On November 1, 1979, the authority issued $267 million of refunding bonds, which refunded the pollution abatement bonds and clean water bonds and produced approximately $85 million of new money to commence its current program, Safe Water Program, which is a plan to extend to December 31, 1989.

The Safe Water Program has, to date, financed 105 projects, totaling approximately $510 million. In addition to the $85 million of new money produced from the refunder, the Safe Water Program is also supported by the surplus paybacks from the loans pledged to the refunder.

As you undertake your consideration of Senate bill 652, I believe that the history and experience of the Ohio Water Development Authority should be of significance to you. From an initial appropriation of $100 million in 1979, the authority's revolving fund program has financed 368 projects, totaling in excess of $1.5 billion.

The authority currently bills communities to whom it has made loans approximately $44 million per annum. Since the inception of the program in 1979, only one community has defaulted in one semiannual payment, totaling $28,000. The community is now current.

I have filed with your staff written testimony which describes the revolving fund program of the authority in great detail. The program involves a complex financing program at the State level, but is a very simple program for local communities in Ohio.

A local community, to obtain financing under the program, must simply sign a cooperative agreement with the authority, agreeing to build the project, to make the repayments called for by the contract and to assign any Federal grants that it has received for the program.

It must pass rate legislation which will provide revenue from the utility system being financed sufficient to make the repayments to the authority under the cooperative agreement, after payment of operating and maintenance costs. It must provide an amortization schedule showing its ability to make the repayments based on such rates.

The obligation of the local community to repay is limited to the revenue of the utility system being financed. So that no debt is incurred by the community.

The authority has been able to operate with a small staff, averaging approximately eight persons over its existence. It has made judicious use of financial and legal consultants; the Ohio Co. is financial adviser; and Squire, Sanders & Dempsey is bond counsel. This has enabled the authority to operate with a small staff.

I have reviewed Senate bill 652 and wish to advise you that I believe the concept of a State revolving fund is a workable concept. We have made it work in Ohio to the benefit of our local communities.

To make it work does take hard work by dedicated people. It will undoubtedly require the enactment of new laws in many States and may require State supreme court interpretations of State constitutions in order to implement such revolving funds in some States. But the work and energy and dedication required to——

Senator **Chafee**. Do you want to hold up right there, Mr. Ransom, until the stenographer fixes his paper?

Mr. **Ransom**. I almost made it.

Senator **Chafee**. Do you want to proceed?

Mr. **Ransom**. But the work and energy and dedication required to implement such a program is worth the effort based on our experience in Ohio. I do recommend Senate bill 652 for your serious consideration.

Thank you.

Senator **Chafee**. Well, thank you very much, Mr Ransom. Nothing like having somebody who has had the experience. We appreciate that.

Mr. Prime.

STATEMENT OF KERMIT PRIME, BOYLE ENGINEERING CO., ORLANDO, FL, ON BEHALF OF THE NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Mr. **Prime**. Thank you, Mr. Chairman. My name is Kermit Prime, managing principal, Boyle Engineering Corp., and here today as chairman of the NSPE, legislative and governmental affairs committee.

Mr. Chairman, with the Committee's permission, I would like our written statement and the supporting statement from the American Consulting Engineers Journal, which we will provide to you, entered into the record, and I will summarize.

Members of both organizations have been deeply involved in the planning, design, construction, and operation of wastewater treatment plants for many decades. Throughout these phases, we provide economic feasibility studies that are used by municipalities and investors to capitalize their projects and implement user fee rate structures.

The goals of the Clean Water Act, which we take very seriously, will be difficult, if not impossible to achieve under Federal grant programs. Core needs alone are now estimated at over $40 billion. In light of Federal budgetary constraints, increased funding in the Construction Grants Program is unlikely.

In fact, we support termination of the use of grants for new projects for fiscal year 1986, because it causes delays, contributes to inflationary cost increases and defers pollution abatement construction.

Chairman Chafee's bill, Senate 652, is a bold innovative financing approach. Loans instead of grants can generate more construction of pollution control facilities prior to the 1988 deadline.

We further recommend several modifications that would leverage the Federal investment to a greater degree than would be possible with the bill as it is currently written.

First, for loans, do not continue the old title II grant requirements. These requirements increase costs, and cause delay. States may be given the option but not the mandate on these policies.

Second, give States the flexibility of judgment to use these loan guarantees and interest subsidies as an alternative to direct loans for financing facilities. State revolving loan funds, often referred to as SRF's will have greater leveraging power if the Federal funds are allowed to be placed in an interest bearing reserve account.

This account would then be used to insure or guarantee repayment of bonds issued to the private market and to provide a source of funds to be utilized for interest subsidies during the life of the loans. The guarantee and an interest subsidy, if needed, would substantially lower interest rates, and therefore, user fees.

As discussed in our written testimony, we do not believe that it was Senator Chafee's intent to close this important option to the

States. There are some provisions in the bill which may require some further clarification in this regard.

Third, section 602(b)(5)(c) of S. 652 requires that the SRF's first be used to meet the enforceable requirements of the act. This will offer practical problems in implementing the programs and we have offered alternative approaches to this provision in our written testimony.

Fourth, we recognize that municipalities which have received phase segmented funding need to be provided some grant assistance to complete their projects. Also, you may wish to consider some special provisions for the very large and very small municipalities.

Last, we have performed substantial financial modeling of the various Federal assistance alternatives that you are considering.

Though we do not have the time to present the details here, we would like for you to know that it appears that, with comparable assumptions, the guarantee-subsidy option would leverage the Federal buying power for these needs about 1½ times more than with the leveraged SRF's, which is the best option currently available in the bill as written.

We would be pleased to share the details of these efforts with your staff. This testimony is intended to improve the innovative program embodied in S. 652.

We appreciate your consideration of these comments. I would be pleased to answer your questions at this time.

Senator CHAFEE. Well, thank you very much, Mr. Prime. Those are thoughtful suggestions. I noted that toward the end of your testimony you think that the $2.4 billion as grants should not be continued beyond the funding for those projects that are already underway.

Mr. PRIME. Yes, sir; that is so we could maximize the leveraging much greater than is possible with the grants and try to achieve the enforceable requirements of the act by 1988 or as much of them as possible.

Senator CHAFEE. Get the money into the loan fund.

Mr. PRIME. Yes, sir.

Senator CHAFEE. I see. Mr. Ransom, your testimony was very helpful because you had experience with this.

Mr. Prime, have you seen many of these loan funds in operation?

Mr. PRIME. We have one also in the State of Florida. It is a totally State-run program that is operating without Federal assistance. I would say that it is used primarily by the rural communities that don't have another method of access to the bond market at favorable rates.

Senator CHAFEE. I see. How does it work?

Mr. PRIME. As far as I know it works fine. The medium sized communities that have good access and can get favorable interest rates don't use it because they don't need to use it.

But the point there is the State doesn't really give the subsidy that we are talking about in our testimony. They are just giving the better credit rating that is available by virtue of a State bond.

Senator CHAFEE. I would ask all the panelists the following question: The panel before you, as you know, indicated some pessimism of going into this loan program. They thought a transition would be disruptive, treatment would be put off, problems of constitution and so forth.

What do you say to all that? Mr. Ransom, you address that.

Mr. RANSOM. I agree that there may be problems with some States with their legislation. However, I think it is a worthwhile objective. You have given sufficient time to take care of those problems.

I think it is an excellent program for financing facilities through a State revolving fund.

Senator CHAFEE. How about you, Mr. Boast? Have you or members of your particular firm seen these in action?

Mr. BOAST. A number of States have loan programs that operate under a variety of different mechanisms. The programs in New Jersey most comparable to those contemplated in S. 652 are two loan programs, both of which are capitalized from State general obligation bond proceeds—one is for parks, one is for local water systems.

Under each general obligation bond authorization and under each administration of the loan program details must be different because essentially the borrowers are different kinds of entities in the two situations.

Even within one State, with Federal money going into the State revolving fund, there could be problems with some of the entities in a program and no problems with others.

It is a workable mechanism, as Ohio has demonstrated, and as the more traditional municipal bond banks in some States show. But it is a different mechanism than a bond bank because it can provide more leverage over time and a continuing, predictable source of capital available at the State level for continuing needs.

Senator CHAFEE. Yes. OK. Thank you.

Senator Lautenberg.

Senator LAUTENBERG. Thank you, Mr. Chairman. I was interested, Mr. Ransom, in your view on the revolving loan program and it looks like it worked well in Ohio.

For purposes of understanding, what has happened with your fees, taxes, in some of these cities?

Mr. RANSOM. Our agreement with local communities are nondebt agreements. They are based upon a pledge of revenues from use of the facility.

Senator LAUTENBERG. User fees.

Mr. RANSOM. User fees; right. We have looked at those in our requirement that they have proper legislation in effect that will produce revenues to first operate the facility; and second, to repay any debt obligations.

We require an amortization schedule which shows what those revenues will produce and there will be sufficient revenue to——

Senator LAUTENBERG. The thing that I am concerned about, quite frankly, coming from New Jersey, is what happens in terms of magnitude of costs by virtue of shifting from a tax participation in the community to full scale user fee?

Is there a significant increase in user fees? Have you heard anybody squealing about it, or has it all just been accepted?

Mr. RANSOM. I don't think any rate increase is without public effect. In Ohio, in our relationships with the Environmental Protection Agency in Ohio, we have pretty well established what local communities can afford to pay based upon median family income and what their annual charges would be.

We have set up a demonstration program in Ohio where we subsidize interest rates for communities that need to build facilities that are unaffordable.

Senator LAUTENBERG. That is your agency?

Mr. RANSOM. The Ohio Water Development Authority.

Senator LAUTENBERG. You subsidize?

Mr. RANSOM. Subsidize interest rates for the few communities that EPA feels are necessary pollution control facilities and are unaffordable at market interest rates. We can then loan them money as low as 2 percent, if certificated by the EPA Director.

Senator LAUTENBERG. Mr. Prime, you wanted to say something.

Mr. PRIME. Yes, Mr. Lautenberg, we have done a lot of research on this because that is the thrust of our proposal. I would say to you that a 2- to 5-percent interest subsidy is equivalent to a 55-percent grant in terms of impact on user fees. That is a mathematical known. We can prove that.

Senator LAUTENBERG. I am sure you can mathematically. The question that I have is whether or not we aren't saying that the communities that can afford to pay are really subsidizing those who can't afford to pay and we are shifting therefore, the responsibility from the Federal Government to the communities in the State that can afford to carry the burden to help those out who are in a more difficult position.

Does that go over well, do you think?

Mr. PRIME. That is a real concern. In fact it is usually the communities that are less able to pay that are going to have a higher interest rate in the market.

Therefore, bringing all communities to the same goal is in effect, helping those with the greatest need. I know that may seem a little unusual.

Senator LAUTENBERG. Yes.

Mr. PRIME. But again, we would be glad to meet with you or your staff to show you how that would work. It really helps those with the greatest need the most because they would have the highest rate in the market.

Senator LAUTENBERG. Yes, there is no doubt that it helps them. My question is, who pays for the subsidized rate? It is obvious that this has to be moved around. If you get down to 2 percent loans, that is pretty generous in today's times.

I want to ask you another question, Mr. Ransom. You have 300 projects that cost $600 million to service. Can we use $2 million as an average to get these plants started?

Mr. RANSOM. Well, Senator, our program is voluntary. It is optional with local governments. I would say that a majority of our financing is with small communities, counties. The major metropolitan areas can sell their own revenue bonds probably at an equivalent rate to ours.

Senator LAUTENBERG. At an equivalent rate to yours?

Mr. RANSOM. Yes.

Senator LAUTENBERG. I know your State has cities with problems. Youngstown, for example, and others who have a serious decline in revenues. They can't go out and borrow money at the same rate.

Mr. RANSOM. We are financing Youngstown. What I am referring to is the city of Columbus, the Northwest Ohio Sewer District, which is Cleveland and all the suburbs, the Hamilton County Metropolitan Sewer District, which is Cincinnati and the suburbs. They can do as well as we can with a revenue bond.

Senator LAUTENBERG. Those are the more affluent.

Mr. RANSOM. Those are the only ones that we have not been involved in in the last 10 years. We are financing——

Senator LAUTENBERG. So they are kind of left on their own to search for ways.

Mr. RANSOM. They have the ability to do it, yes.

Senator LAUTENBERG. I wanted to ask Mr. Boast a few questions. In your review for the wonderful Garden State of New Jersey, did you analyze your recommendations in terms of just the financing requirement or did you get into the special cases where communities are under siege economically and can't generate the revenues to easily pay for these things. Did you deal with that?

Mr. BOAST. Senator, I would be happy to try to comment on that point, although it is a public policy question that is somewhat out of my area. The State working group that Bear, Stearns worked with in relation to the Infrastructure Bank included representatives from the Treasurer's Office, the Department of Environmental Protection, and the Department of Transportation, who were sensitive to this issue.

The cost impact on localities receiving loans rather than grants was clearly a concern in the program and continues to be a concern in the environmental infrastructure trust proposal that is currently pending.

The technical papers prepared by the working group included discussion of the impact of increased user charges. With the permission of the committee, I would like the papers included the hearing record.

The principal conclusion that one could draw was that, compared to a 55-percent grant program, it is certain that there are increased costs that are difficult to be met. But there are also communities under economic siege because they would like to develop, and perhaps they are economically distressed in other ways; development is important but they are under a development ban.

So in that instance, perhaps if there were no loan program, they would have to finance 100 percent of a project on their own in the marketplace, which would be much more expensive than a combination of loans and local share financing.

So again, there are many, many economic microsituations that are unique. The financial models that we developed and we can explain them to your staff, show the interaction between the long-run funding capability, from the State's perspective, of the State revolving fund and the degree of subsidy that is provided for local user fees and the tradeoffs that can be identified.

It really is a public policy question that each State would best work out—and probably better States working it out than the Federal Government.

Senator LAUTENBERG. Thank you.

Senator **Chafee**. Senator Mitchell, we welcome you. Do you have a statement that you would like to make at this time or ask some questions?

Senator **Mitchell**. I will proceed directly to the questions, Mr. Chairman.

I apologize to members of the panel for not having been here. I had to attend another committee hearing. This committee is now considering a major decision which would direct about $8 billion away from the established grant program for wastewater treatment construction and instead use that money to support State revolving loan funds.

I am a cosponsor of that legislation that Senator Chafee has authored. I believe that the loan fund concept is much recommended but we are considering a policy change of substantial magnitude, so I want to get your views on that.

There is some concern that revolving loan funds may not prove useful for communities with limited financial capability. So what I would like to do is propose a series of questions which relate to that and then ask each of you to comment on them in narrative fashion.

First, do you believe that the loan fund concept will work? Will such a program be administered effectively in all the States, not just the largest ones? Are you concerned that poor communities may not be able to participate in a State loan fund program? If you are—what suggestions, if any, do you have to address that problem?

You may proceed in any order that you wish.

Mr. **Prime**. Kermit Prime with NSPE. We believe that the loan fund will work. It will produce rates that are comparable to the grants. It will allow projects faster than with grants. We recommend that you consider elimination of title II requirements for the grant—or for the loans, I am sorry.

Administrative effort probably would be no greater once the system was in place. Of course, when you are creating a new system, there will be some inertia to overcome.

With respect to the poor communities, as I have tried to indicate in response to Senator Lautenberg's question, it is our belief that the loan program will actually benefit the poor communities more than it will the more affluent communities because those are the communities that have the least easy access to the bond market today. They are the higher credit risks as perceived by the market.

So this program, if you would subsidize the interest down, and our recommendation was 5 percent, not 2, that was NSPE's recommendation, if you subsidize to that level, you would, in fact, be helping them to a greater degree than the more affluent ones.

Senator **Mitchell**. Mr. Ransom.

Mr. **Ransom**. I believe in Ohio we have demonstrated that a revolving fund concept works and works very well and is a very convenient method of financing for most communities in Ohio with the exception being the large metropolitan areas.

We have found that we can finance all projects that need financing. We have not had to refuse financing for any of the local governments in Ohio.

Keep in mind that we do have a subsidized 2-percent program for the very difficult poor communities. But a majority of them are paying market rates as the authority markets revenue bonds. That is probably better than most communities can do on their own, plus the fact that we do not require a coverage in their rate structure that would be required if they issued their own revenue bonds.

So it is a very excellent way to finance projects with the State pooling their resources and issuing bonds for the benefit of local governments.

Senator MITCHELL. Thank you. Mr. Boast.

Mr. BOAST. Again, Senator Mitchell, the question revolves around what is the option. And if the option is 100 percent local financing from the credit markets, which is obviously my expertise primarily, that is more expensive than some kind of low interest rate loan.

I am not hesitant to point out that a revolving loan fund may take business away from consulting engineers and investment bankers, but we think it is a useful kind of mechanism for the Federal Government to be concerned with.

With the variety of options that could be provided—and the flexibility that is already written into S. 652—the degree of subsidy does become somewhat of a State choice, both immediately and over time because a State revolving fund is a long-term mechanism.

It is not just a bond bank mechanism, with the loan repayments solely providing for debt service on bond issuances; instead, the fund becomes a permanent source of capital.

If a State similarly wishes to write legislation that will provide flexibility for the State to have an option as to how those capital resources will be used 10 years from now, one of those options can be to provide, perhaps, a different kind of subsidy program than the State would choose to provide now, that is which local units receive the smallest subsidies or no subsidy at all.

In that respect, a revolving fund represents, I think, somewhat new ground. No one sitting here, certainly not on this side of the table, can definitively say that every local government is going to be able to use a 2-percent loan or a 5-percent loan, because no one can look at all the figures on a piece of paper and say, "Sure, they can afford it."

People may say, "No, we don't want to afford it right now."

Senator MITCHELL. Thank you. Let me ask another question on private financing that has been the subject of some discussion.

Some have suggested that the advantages of the accelerated depreciation of a facility and its equipment and the availability of the investment tax credit and tax exempt municipal bonds; that private financing can offset a sizable portion of identifiable treatment needs and therefore Federal grant programs can and should be terminated.

Others argue that private financing faces major obstacles and might only address a small portion of treatment needs.

Again, I would like to ask a series of questions and ask if each of you could comment on it.

What is your view of the role of private financing in wastewater treatment construction? How much of the total treatment needs might be met with private financing? And what, if anything, can Congress do to facilitate private financing?

Mr. **Prime**. Should I go first again?

Senator **Mitchell**. Yes.

Mr. **Prime**. With respect to privatization, I think that the role is primarily where you have a system which involves operation and maintenance needs. It is equipment intensive because they can depreciate that faster.

Related to treatment plants, the funding is probably easier in the growth State or a growth municipality than in one that is static or on the decline.

How much: I don't know. I don't have the national perspective on growth. I think that is the key to answering the question, how much.

What you can do to facilitate it: I think it will be to continue to support the provisions related to investment tax credits and industrial tax—tax for industrial revenue bonds and accelerated depreciation as it relates to pollution control facilities. And I would suggest that this is an option that should be left available to the local units of government.

Mr. **Ransom**. We have not had experience with privatization of pollution control facilities in Ohio. I think it is difficult to implement such a program with existing facilities where you have publicly owned facilities and need to make major improvements. It is hard to divide the responsibilities.

I think in cases where new facilities are necessary, it probably would be an excellent means of financing if the tax credits were available to private industry. So far, we have no experience with that type of financing.

Senator **Mitchell**. Mr. Boast.

Mr. **Boast**. In the larger sense, in 1984 dollars, if one looks at EPA's 1984 needs report, I think that the total need through the year 2000 was $100 billion. So under existing tax law, a crude estimate of 25 percent equity ownership in a private facility would result in about $25 billion of private equity.

Obviously the U.S. Treasury believes that the tax expenditures associated with depreciation and investment tax credit on that kind of private investment are too large, given the proposals that were made a few months ago.

I would agree with Mr. Prime that the privatization mechanisms are fairly young financing tools right now, just because the tax provisions have been favorable for only 4 years. That is a fairly short period of time in developing new markets.

If there were further reductions in tax benefits, it might choke off that new industry, if you will. The further complication is that after 1986 the industrial development bond caps come down further. Because you don't necessarily have 100-percent financing for a privately owned facility it has been most favorable if a portion can be financed at tax exempt rates on industrial development bonds.

And states will increasingly come up to their State volume caps, especially if the cap does come down after 1986. So I would say that the future for privatization, at least at the most favorable rates that have been achieved in transactions to date, looks fairly uncertain at this point.

Privatization for some localities may still be favorable at taxable rates, however, if there is a particular vendor relationship that perhaps can lead to a better kind of wastewater treatment facility, a lower operating cost structure, lower construction costs, and a better, from the locality's point of view, risk posture because it is not a publicly owned facility anymore.

Again, that is a tradeoff. The locality may be willing to pay a taxable rate, rather than use local credit, in order to preserve local bonding capacity for other types of facilities and not have the risks of ownership of the wastewater treatment plant, particularly in light of the potential problems with obtaining insurance that were talked about earlier this morning.

Mr. PRIME. If I could add to the answer. Our firm has been involved in two privatization endeavors on behalf of our municipal clients. In the case of Scottsdale, AZ, it worked, it worked well. They are going into the program.

In the case of Orlando, FL, however, which is a $70 million project, about $38 million of which was treatment plant, the negotiations failed. And they failed over agreement related to principles of cost and risk.

That is why I was careful to say, allow it to be used but don't depend on it, because it is not a certainty by far. I was personally involved in the one in Orlando. It is a very complex program to set up for a major project.

Senator CHAFEE. Any more, Senator?

Senator MITCHELL. No. Thank you, Mr. Chairman.

Senator LAUTENBERG. I have a couple more.

Senator CHAFEE. Why don't you go ahead.

Senator LAUTENBERG. All right. Thank you.

Mr. Boast, as I understood your testimony, you talk about zero cost.

Mr. BOAST. Yes, each State could choose, I suppose, what interest rate to use. I believe S. 652 does provide the possibility of as low as a zero interest rate.

Senator LAUTENBERG. I assume that even though the name is different on the statement, it is the same statement.

Mr. BOAST. Yes, Mr. Giglio couldn't be here this morning, given competing needs.

Senator LAUTENBERG. There is no need to explain. But you do say, in the wastewater area, funding through the banks using zero interest rates, is that the position that you advocate?

Mr. BOAST. That would be more of a cost kind of question that each State revolving fund administrator, whether it be a working group or a State treasurer, would work out. And we, if we were a financial adviser——

Senator LAUTENBERG. Would that be a special application depending on the community's ability to deal with it?

Mr. BOAST. And depending on what the State policy goal is for, let's say, the constant dollar value of the loan repayment.

Senator LAUTENBERG. You couldn't do it at zero interest rate, with costs for administration and so forth. It is pretty obvious that there is going to have to be ability to hedge against inflation. It seems impossible to me that one could operate without collecting some kind of an interest rate to sustain it.

Mr. Boast. Well, in due respect, it will sustain but it wouldn't necessarily be the same value in say 1995 as the State revolving fund had at initial capitalization in 1985.

But again, that is really a policy question over how much subsidy to provide versus how much funding capacity to achieve in the long run. But that, in a sense, is the power of a State revolving fund, because States can make those kinds of tradeoff decisions much more forthrightly and clearly than perhaps tradeoff decisions have been made under a Construction Grants Program where the amount of construction cost may in some instances be driven by the amount of Federal grant money that is available.

Senator Lautenberg. I respectfully acknowledge your point of view. You kind of hedged a little bit but that is not uncommon here either. I don't think you can write this in concrete with the problems that result as you go along. Does the availability of funding depend on the ability of the large urban areas? In our State for instance, where we have very serious problems with having three of America's poorest cities within the State borders. Their ability to repay these loans in order to keep the bank capitalized of course is a major factor. Is that not the case?

Mr. Boast. Yes, sir, absolutely.

Senator Lautenberg. Mr. Ransom, in Ohio you say you had one delinquency for a period of 6 months. Do you first require creditworthiness from the communities that your agency is funding money to?

Mr. Ransom. No, sir. We depend entirely upon the rate structure of the utility. We are not concerned with their ability to issue obligation bonds or raise taxes. The revenue produced by the utility supports this program entirely.

Senator Lautenberg. Those are dedicated funds?

Mr. Ransom. Absolutely.

Senator Lautenberg. You have had that experience now with 300 communities, is that right?

Mr. Ransom. Yes.

Senator Lautenberg. What has been the average rate increase for wastewater treatment in these communities?

Mr. Ransom. Average is a difficult thing to quote.

Senator Lautenberg. What has been the extremes?

Mr. Ransom. We have had municipalities that need to make improvements to existing facilities which would be a minor increase. We have had communities that have built entirely new facilities where the rates have been as high as $20 a month.

That is pretty much the breakpoint as far as we are concerned. If it is beyond that, we look to the EPA to certify a reduced interest rate to get that project built.

Senator Lautenberg. $20 a month for a household?

Mr. Ransom. A residence, yes.

Senator Lautenberg. I guess a grant would be even cheaper than that. But the problem then is whether or not we can deliver these services at a reasonable rate, get subsidies for the lower cost loans and you are here saying today, are you not, Mr. Ransom, that—I know Mr. Prime shares the view, I think vigorously, the way he described it—that grants are not really required, that the way to go is to have the revolving fund, get it financed initially, and abolish the grant program altogether.

Mr. **Ransom**. I believe if you give the States sufficient time to change their laws, their constitutions as necessary to gradually work into this program, yes, I think that is the objective.

Senator **Lautenberg**. So the user is the one that——

Mr. **Ransom**. Benefits.

Senator **Lautenberg**. Benefits and pays.

Mr. **Ransom**. That's correct.

Senator **Lautenberg**. Is that correct?

Mr. **Ransom**. Yes.

Senator **Lautenberg**. OK. Thanks very much.

Senator **Chafee**. Well, we also like to think that the whole community and Nation is benefited in that the waters are cleaner, which is the thrust of the program.

One quick question, Mr. Prime. In your testimony, you say that 60 percent of the costs should be used to meet enforceable requirements, namely the treatment requirements that we have and that 40 percent be used for local needs.

What are you talking about when you say local needs, collectors for example?

Mr. **Prime**. Rather than have Congress try to wrestle with what is there for the other 40 percent, needs vary so greatly throughout the Nation, Mr. Chairman, that it could be used for collectors, it could be used for CSO, it could be used for those needed elements in almost any project that isn't directly addressed in enforceable requirements.

I would say to you that 60 percent was picked using judgment, your judgment may be as good. It should be something in the range of 50 so that greater than half the project, and probably if you make it over say 75 percent, you are going to make it so restrictive that a community can't properly structure their contract because typically in financing in the private sector, you identify a contract or an asset, if you will, to support that debt.

Senator **Chafee**. But the objective of the Federal funding is, as you know, at least we said it in 1981 was for clean water.

Mr. **Prime**. Yes, sir.

Senator **Chafee**. Not for growth, not for collectors, not for items such as that.

Mr. **Prime**. I understand and appreciate that but I am talking to a practical issue. If I am building a treatment plant, it is hard to structure the contract if my needs today are 2.35 Mgal/d, it may be appropriate to build a 2.5 Mgal/d or 2.75 Mgal/d plant and then if I have to go to the private sector—and this would be a good question—and say just let me fund or bond, if you will, the portion of the cost out of this contract as a separate issue.

I think you would have a problem with what is called the story bond. I think there would be some real practical issues to deal with. We are just suggesting some flexibility to not put a burdensome requirement on.

Senator **Chafee**. OK, fine. Well, thank you very much.

Thank you, gentlemen, for appearing.

The next panel will be Ms. Loretta Simmons, representing the National Utility Contractors; Mr. Robert Elsperman on behalf of the AGC; and Mr. Francis Grillot on behalf of Water & Equipment Manufacturers Association.

Senator Mitchell.

Senator MITCHELL. Mr. Chairman, I must return to the Finance Committee meeting which I was at earlier. I would like to ask that the questions that I have would be submitted to the panelists in writing with the request that they respond in writing at their convenience.

Senator CHAFEE. Yes, that is fine. You all heard that. Senator Mitchell has some questions which he will direct to the specific individual?

Senator MITCHELL. No, they will go to all of them and I would ask them each to respond.

Senator CHAFEE. If you could return those as rapidly as possible to the clerk of the committee. To Mr. Baily Guard, G-U-A-R-D, at this address.

Senator MITCHELL. Thank you, Mr. Chairman.

Senator CHAFEE. Fine, thank you, Senator. All right. Ms. Simmons.

STATEMENT OF LORETTA SIMMONS, PRESIDENT, BLAIR SUPPLY CO., ROCHESTER, NY, ON BEHALF OF THE NATIONAL UTILITY CONTRACTORS ASSOCIATION

Ms. SIMMONS. Mr. Chairman and members of the committee, the National Utility Contractors Association or NUCA, for short, is made up of 2,000 contractors, suppliers, and manufacturers nationwide that specialize in water delivery and wastewater treatment construction projects, particularly pipeline underground work.

In short, it is our job to build the projects necessary to meet the clean water requirements that are mandated by Congress.

We take this opportunity to offer the utility construction industry views on the program and to offer our recommendations and possible improvements to the Clean Water Act.

We feel that continued Federal funding for the EPA Construction Grants Programs is essential. We respectfully urge the Congress to adopt a 3- to 5-year reauthorization plan that does not specify a phase-out.

NUCA strongly supports an increase of $500 million to $1 billion above the current $2.4 billion in yearly authorizations.

In addition, we also firmly believe that more of the funding burden must be assumed by State and local governments. We feel that this can be accomplished through a tough EPA enforcement policy.

Our recommendation to increase yearly funding is due largely to our firm belief in the critical link between adequate wastewater treatment facilities and future economic growth. It is also a result of the apparently imminent reductions in Federal funding for other programs to finance sewerage treatment such as Farmers Home Administration, HUD Community Development and others.

Obviously, we are open to criticism for advocating an increase in spending but we feel it is crucial to realize that Federal funding for water pollution control programs has decreased more than 40 percent since 1980. During that same period, Federal spending for defense and entitlement has skyrocketed.

As an early staunch advocate of the establishment of State revolving funds, NUCA enthusiastically supports section 4 of S. 652 which gives any State the option of using its title II grant to capitalize its revolving fund for sewerage treatment construction.

On this section, we would like to make the following points: One, language should be added requiring that wastewater treatment loan repayments be dedicated toward additional sewerage treatment projects to ensure the continued use of the money totally for sewerage treatment.

Two, we support the language that permits——

Senator CHAFEE. What are you talking about? What is your worry there, Ms. Simmons? That some of it can be used for collectors and so forth?

Ms. SIMMONS. No, we don't want it to be——

Senator CHAFEE. The act does that. Unless you have something specific that you are thinking of.

Ms. SIMMONS. I guess our concern is that the municipality might use it to build a new park or monument to the mayor.

Senator CHAFEE. Oh, no. I don't think there is any suggestion about that. If you have a worry list, put that low down it.

Ms. SIMMONS. All right.

No. 2, we support the languages that permits States to use their grant money as either grants or loans.

No. 3, our industry also supports the Chafee proposal requiring States to contribute a share equal to 15 percent of its Federal grant for inclusion in the revolving loan fund.

We wish to stress the continued importance of collectors, rehabilitation, and combined sewer overflow correction projects.

We urge the committee to: First, make no further reductions in the 20-percent Government set-aside fund, and second, amend section 602 of the Chafee bill by permitting States to use revolving fund moneys for all categories of construction.

On the issue of funding for collector pipelines, there can be no doubt that these systems are a crucial element in this Nation's clean water effort. Wastewater treatment systems are just that, systems. The efficiency of a system is dependent on each one of its parts and a sophisticated treatment plant does little good if the pipelines carrying the sewerage to it are aged, leaking, and corroded.

Replacing or repairing collector sewers would result in more efficient and less costly operation of the existing plants as well as the construction of more efficient new plants in the future.

In supporting full eligibility for collector construction under the State loan program, we want to stress that collectors represent more than just growth. The repair and the replacement of existing collector sewer systems remains an issue of importance to the public health.

Any State should be given the flexibility to finance truly necessary collector rehabilitation and CSO projects through their loan programs.

Mr. Chairman, that concludes my brief overview of our testimony.

Joining me today is Gerry Kenny of Kenny Construction Co. in Chicago, who is the chairman of NUCA's Government Relations Committee.

Thank you for your kind attention.

Senator **Chafee**. Well, thank you, Ms. Simmons, and thank you, Mr. Kenny, for appearing here. You came from Chicago for this?

Mr. **Kenny**. Yes, sir.

Senator **Chafee**. Well, we are glad to have you.

Mr. Elsperman.

STATEMENT OF ROBERT ELSPERMAN, PRESIDENT, TARLTON CORP., ST. LOUIS, MO, ON BEHALF OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

Mr. **Elsperman**. Thank you, Mr. Chairman. My name is Robert P. Elsperman, president of the Tarlton Corp., St. Louis, MO. I am here today representing the Associated General Contractors of America for which I serve as chairman of the municipal utilities division.

AGC represents more than 32,000 firms including 8,400 of America's leading general contracting companies which are responsible for the employment of more than 3,400,000 individuals.

These member contractors perform more than 80 percent of America's contract construction of commercial buildings, highways, industrial, and municipal utilities facilities.

I appreciate the opportunity to testify before this committee on the important topic of the Clean Water Act and the reauthorization of the EPA Construction Grants Program, as outlined in S. 652.

Congress first recognized the need to improve the quality of the Nation's waters in 1956 and then made a major advance with legislation in 1972.

Since that time, over $40 billion in Federal funds have been provided to municipalities for the construction of publicly owned treatment facilities. This has resulted in a noticeable improvement in water quality with over 60 percent of the Nation's rivers and streams now meeting clean water goals.

Congress made major changes with the Clean Water Act in 1981 by reducing the Federal involvement and placing greater responsibility on the States in managing the Construction Grants Program. AGC participated in the development of legislation and supported its enactment.

Senator **Chafee**. Now, Mr. Elsperman, you are going to have a tough time meeting your 5 minutes but you keep going any way you wish.

Mr. **Elsperman**. Will do, Senator, thank you.

Senator **Chafee**. Thanks.

Mr. **Elsperman**. Although great strides have been made, the job is not yet complete. EPA has reported, as a result of its needs survey, that over $100 billion will be needed through the year 2,000 to construct the wastewater treatment facilities needed to meet clean water goals.

Projects eligible for Federal funding total over $35 billion. Past levels of funding have not been adequate, certainly projected funding levels at $2.4 billion annually are even less than adequate to do the job. It is clear that funding must be increased at all levels, Federal, State, and local to meet these needs.

There is an urgent need to address the rebuilding of our Nation's infrastructure. Many local governments just do not have the basic infrastructure, such as water and sewer systems, needed to serve existing industry or to allow for the expansion of existing industries let alone the possibility of attracting new industry.

Failure to meet basic infrastructure needs frustrates not only the achievement of clean water goals, thus threatening the health and safety of citizens, but also severely threatens economic growth.

No clearer example exists than the recent Boston situation. The inadequacies of wastewater treatment facilities in the Boston area and the resulting pollution of Boston harbor are well known.

What is less well known is the enormous volume of economic activity dependent on Boston's outmoded and inadequate wastewater treatment system. In December 1984, most construction in Boston was briefly brought to a halt by a retroactive 18-month moratorium on sewer hookups.

AGC has analyzed building permit data in the 43 cities and towns represented by the Boston Metropolitan District Commission which were impacted by the proposed moratorium and found that economic activity of almost $3.2 billion was generated by the $1.1 billion value of building permits filed during that 18-month period.

In addition, 24,913 construction jobs, 24,700 off-site jobs and 42,353 jobs—excuse me—induced by the ripple effect on the economy for a total of 91,965 jobs were the direct result of construction in Boston during this timeframe.

Basic infrastructure needs must be met or severe economic dislocations will occur. The unalterable fact is that public works investments must be increased at all levels of government. Based on the demonstrated needs of over $100 billion, it is clear there is a need for a continued Federal role to assure the achievement of clean water goals and continue economic revitalization.

AGC recommends that Federal financing assistance continued at a minimum level of $2.4 billion annually through 1990, which is consistent with the Federal commitment expressed in the 1981 amendments.

Just as important, Senate bill 652 provides a mechanism for alternative financing. The State revolving fund provides States with great flexibility to use those funds for needed wastewater treatment projects, to make low interest loans, to guarantee local obligations, to improve credit market access.

It also requires States to supplement Federal assistance by requiring a State contribution of 15 percent to match Federal funds. AGC also recommends that the intent of the 1981 amendments be expanded to delegate total management of the Construction Grants Program to the States, with EPA continuing management oversight, enforcement, and the auditing functions.

States should be allowed to establish project priorities consistent with water quality goals and should be allowed to use funds for all construction costs of wastewater treatment facilities including full funding for collector systems.

In order to meet clean water goals and deadlines, Congress should also reemphasize strong Federal enforcement of effluent discharge permit requirements, consistent with the EPA municipal enforcement policy calling for compliance by 1988.

This policy in implementation of statutory requirements provides that all wastewater discharges into receiving waters must meet applicable water quality standards and directs municipalities to provide the facilities to adequately meet the standards.

Effective enforcement of this policy will provide the needed impetus to municipalities to make the necessary capital expenditures. Our Nation can no longer afford to have these vital capital expenditures relegated to some secondary role.

Mr. Chairman, Senate bill 652 is a step in the right direction. AGC commends you and your committee for the initiative in this proposed legislation and recommends its speedy enactment.

Senator **Chafee**. Thank you very much, Mr. Elsperman.

Mr. **Grillot**.

STATEMENT OF FRANCIS GRILLOT, A.O. SMITH HARVESTORE PRODUCTS, INC., CHAIRMAN ELECT, WATER & WASTEWATER EQUIPMENT MANUFACTURERS ASSOCIATION

Mr. **Grillot**. Mr. Chairman, members of the subcommittee, I am Francis Grillot, of A.O. Smith Harvestore Products, Inc., and chairman elect of the Water & Wastewater Equipment Manufacturers Association, which I will refer to as WWEMA from now on.

WWEMA is a 77-year-old organization of over 120 corporations, has developed technology, manufactured supply equipment, materials and services for the water supply and water pollution control industry. Our plants, in nearly all 50 States, employ some 50,000 people.

At the outset, we wish to emphasize that WWEMA believes that the Clean Water Program has progressed toward the goals of the Clean Water Act. We remain optimistic about the opportunities for continued progress in the future. We are, of course, aware of the complexities and problems that have beset the national effort to improve water quality.

WWEMA is pleased, therefore, to offer our support to the concept, if not the form, of your proposal to change the grants program to the State-run loan program.

WWEMA recently surveyed 44 State water pollution control administrators representing 90 percent of the total funds allocated to the Construction Grants Program; 73 percent indicated that the July 1, 1988, deadline will be unachievable, due mainly to the lack of financial capability under current programs.

Other problems cited include local government inability to provide the 45 percent local share of the project cost and lack of alternative financing mechanisms. Several of the States responding stated their expectation that the 1988 deadline would, as in the past, be extended.

This expectation must not be fulfilled. We urge you to require all entities receiving Federal grants or loans under the Construction

Grants Program as well as those entities unable to secure Federal assistance to meet the national municipal policy requirements for compliance or an enforceable plan by 1988.

WWEMA proposes that the current Construction Grants Program be replaced over a 5-year period with a loan-guarantee program. This short transition time provides continued funding stability to support the goals and the July 1, 1988, deadline of the national municipal policy and encourages the State and municipalities to develop their own financing mechanisms for sewerage treatment in an orderly fashion.

The logical time to begin the transition from Federal grants to self-supporting loan guarantees is now, when the Construction Grants Program is undergoing reauthorization and amendment. The transition should be completed by 1990 when all Federal funding would end.

To provide an incentive for municipalities to move toward compliance and to provide sufficient funding to provide for a smooth transition to State-run loan programs, the Federal commitment to the Construction Grants Program should be increased to $5 billion annually through 1990.

This rise in grant funding is not exorbitant. Rather, it is necessary to give as many municipalities as possible incentives to begin planning, if not construction, of water treatment facilities.

In 1987, $1 billion would be dedicated to loan guarantee programs in States with a program framework in place. The grants portion could continue to decrease at $1 billion each year and the loan guarantee funding could increase by the same amount through 1990.

While we recognize and approve your support of the 10-year funding commitment made during the passage of the 1981 amendments, we believe the situation has changed sufficiently to warrant the slightly different approach that WWEMA proposes. The 5-year transition from grants to loan guarantees that we propose will end Federal participation only 1 year short of the 10 years promised.

Any Federal guarantee program must include viable means for retiring the debt. Additional benefits accrue if loan retirement generates additional revenues that can be used to maintain existing systems or to finance the projects.

It is imperative that States design a mechanism for repayment that will result in self-sufficiency. User fees would achieve both objectives while allowing the municipality to equitably allocate costs of water treatment among dischargers.

In addition, user fees would enhance the access to capital markets by attracting investors to projects with a dedicated guaranteed flow of revenue. With the budgetary constraints facing all levels of government, pollution control efforts must compete with expenditures from a myriad of other government supplied services, including police, fire protection, education, defense, highways, and social services.

WWEMA urges that tax incentives such as accelerated depreciation and investment tax credits be maintained on these programs to enhance private financing for wastewater facilities. The bond market continues to be the primary source of funds, other than Federal grants, for wastewater treatment.

Industrial development bonds provide one source of capital for private industry interested in building wastewater treatment facilities. Restrictions on industrial development bonds for sewerage treatment should be removed.

Finally, the mandatory 4 percent set-aside for innovative and alternative technology projects included in the 1981 Clean Water Act must be maintained for the duration of these programs.

I would be pleased to answer any questions.

Senator CHAFEE. Well, thank you and Ms. Simmons very much for appearing. Let me just ask you, Mr. Grillot and also Mr. Elsperman, on your last point, the I and A, have any of you seen anything worthwhile come out of the I and A?

Mr. GRILLOT. The answer to the question, Mr. Chafee, is, yes. We have seen it. I cannot be specific at this point in time but one of the problems that has occurred over the years in the development—research and development in the construction grants program or at least in the water part is that through the 1970's there was a gross lack of initiative to develop new ways of doing things. As a result we continued to do the same things over and over.

With this type of program, 4 percent set-aside, it will enhance our industry's interest in developing new ways, new technology and we believe it is worthwhile to——

Senator CHAFEE. Except we have had it since 1981.

Mr. GRILLOT. Sir?

Senator CHAFEE. We have had it since 1981, maybe before.

Mr. GRILLOT. There have been new innovative technologies developed since that time. Of course, research doesn't turn the tap in a short period of time. It takes——

Senator CHAFEE. I am not trying to put you on the spot but can you give me an illustration of something significant that you think has come out of this?

Mr. GRILLOT. At this point in time I can't give you a specific item, no.

Senator CHAFEE. All right. Mr. Elsperman, do you have any thoughts on that?

Mr. ELSPERMAN. Senator, Mr. Chairman, I have not, since it was authorized in 1981, been involved through my company on any projects that used I and A or were eligible for I and A funds. I would suggest that the majority of our members have not. I am not certain what has been accomplished by it.

Senator CHAFEE. Do you have any thoughts on this, Mr. Kenny, Ms. Simmons?

Mr. KENNY. Yes, I do, Senator.

Senator CHAFEE. Are you a member of AGC, Mr. Kenny?

Mr. KENNY. I am a member of NUCA and a member of AGC also, yes, sir.

Senator CHAFEE. I was going to give Mr. Elsperman a chance to sign you up.

Mr. KENNY. I am currently a member already, sir. The problem that you have with the alternative sources, that we see from the contractor's standpoint, is that sometimes the money can be taken and used for, say, putting solar panels on an office building at a sewerage treatment plant and not really be used to drive the technology to further betterment of the sewerage treatment works.

The basic assumption behind it is that the industry over the past 4 or 5 years, with your cutbacks in grants, has become a very price-competitive industry.

Therefore, the money allocated to research is really not available except in this little element. Because of the price competitiveness, they are not using that element. They are not using that to try to generate new ideas. There just isn't the money there to do it.

Senator CHAFEE. You mean the 4 percent wasn't enough?

Mr. KENNY. No, I don't mean that the 4 percent wasn't enough. It is how it is allocated, how it can be used.

Senator CHAFEE. I am not sure about that.

Mr. GRILLOT. Staff advises me that we do have specifics and we will be happy to provide those for the record in writing.

Senator CHAFEE. Why don't you. OK, gentlemen, lady. Thank you very much for coming. We appreciate your being here.

We will continue tomorrow at 9:30.

[Whereupon, at 11:50 a.m., the hearing was recessed.]

[Statements submitted for the record follow:]

TESTIMONY BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

MARCH 27, 1985

SENATOR ROBERT W. KASTEN, JR.

The failure to take action to strengthen the environmental protection of the Great Lakes poses a clear and present threat to human health. Congress must act with all due haste to protect the nation's most important fresh water resource.

Let me give a few examples of this "threat to human health."

HUMAN HEALTH THREATENED DIRECTLY BY CONTAMINATION

First, I would like to cite a 1984 study that links the consumption of great lakes fish to problems in human reproduction.

On July 22 of last year the New York Times ran a headline saying "Peril is Seen for Babies Whose Mothers Ate Fish With PCB's." This article was based on a study of infants born to women who ate fish caught in Lake Michigan. The study concluded that these children had behavioral development problems and physical problems that could be directly attributed to their mother's diet.

I would like to present the Committee with a copy of that article to become a part of your permanent record.

I would also like to present the Committee with a more technical article from the August edition of The Journal of Pediatrics. This article, "Prenatal Exposure to Polychlorinated Biphenyls: Effects on Birth Size and Gestational Age" describes from a scientific perspective some of the human health problems associated with the contamination of the Great Lakes. To summarize most simply, we are seeing the effects of pollution of the Great Lakes manifested today in human health problems.

The problems that have already shown themselves today are not the only ones we face from Lakes pollution. Instead, we can expect to see increased incidence of human health problems as a result of the contamination of the Great Lakes. Human health problems are often predicted by occurrence of those problems in animal populations.

ANIMAL HEALTH EFFECTED

I would like to use two examples to illustrate this point.

First, I would like to site work done by the U.S. Fish and Wildlife Service in Green Bay, Wisconsin. In one of the most statistically significant studies I have ever reviewed, the Fish and Wildlife Service has identified an alarming occurrence of birth defects of fish eating birds in Lake Michigan.

Specifically, the Service studied a Forster's Tern colony near Green Bay, and a control group on an inland lake. I will summarize the findings of this study.

1. The control group on an inland lake had a much higher reproductive success rate than the study group on Lake Michigan.
2. The incubation period was much shorter for the control group than the study group.
3. The mean weight of hatched chicks from the control group was significantly higher than the mean weight of chicks from the study group.
4. The relative weight of the liver to body weight was significantly higher in the Lake Michigan group than for the inland group.
5. Of the birds that hatched from the study group, almost 10% had body deformities.

Like human beings, terns are a predator species. They are near the top of the food chain. They eat animals that have concentrated pollutants such as PCB's, Dioxons, and Furans in their bodies. We eat a lot of those same fish ourselves. The problems that the Forster's terns have today is just beginning to be understood. Unless we act, the people of the Great Lakes region likely will suffer the same consequences.

At this time, I would like to submit to the committee a copy of testimony given to me by Timothy Kubiak of the Fish and Wildlife Service. Mr. Kubiak presented this testimony at a hearing I conducted on this problem in Green Bay last year.

I would now like to illustrate that these health problems are not exclusive to species, such as ourselves, that are at the top of the food chain. I would like to use an example of health problems of species that are a few steps lower on the food chain - fish.

Since the early 1970's the Fish and Wildlife Service laboratory in Ann Arbor, Michigan has been focusing on the effects contaminants in the Great Lakes have on lake trout rehabilitation. The findings of this work are equally astounding.

- For example, in 1980 the Service found that lake trout fry from Southern Lake Michigan suffered a 95% mortality within 5 months of hatching.

- This compares to 48% mortality for hatchery stock; 45% mortality for Lake Superior fry; and 54% mortality for Lake Huron fry.

TOXIC CHEMICALS

Finally, Mr. Chairman, I would like to point out a third threat to human health in the Great Lakes Basin. This Committee is intimately familiar with the problem of improperly disposed toxic materials. As of last fall's listing, the U.S. Geological Survey had identified that a total of 1,930 hazardous waste sites are in the Great Lakes Basin. This is 20% of all of the U.S. hazardous waste sites identified up to that time concentrated in a very small area.

Probably the most amazing fact that I can cite today is that the Clean Water Act is mute on the problems of the Great Lakes. It is incredible that the nation's most basic water law ignores the nation's most important fresh water resource.

I know that there is keen interest on the Committee to consider how to correct this shortcoming as the Clean Water Act is reauthorized.

Later today, I will be introducing the "Great Lakes Management Act of 1985." This legislation directly confronts the problems of the Great Lakes and establishes a truly basin-wide program to deal with the environmental problems of the Great Lakes. In fact, several members of this Committee have joined me as original cosponsors of this bill.

I would like to briefly outline the major components of my legislation.

Specific Actions Provided for in Kasten Bill

1. Establishes a basin wide surveillance and monitoring program;

2. Establishes a mechanism for interagency coordination;
3. Recognizes the Great Lakes National Program Office of EPA as the lead agency for environmental management of the Great Lakes;
4. Recognizes NOAA as the lead agency for Great Lakes research;
5. Establishes a five-year program for reducing nutrient loading in the Great Lakes;
6. Establishes a five-year pilot program to demonstrate techniques for removing in place toxics from lake bottoms; and
7. Requires a regular State of the Lakes Report to be submitted to Congress.

I hope that the Committee will carefully consider the importance of a group of water bodies that were correctly named the "Great Lakes." As part of its deliberations I am sure that the Committee will see the wisdom of providing the nation's most important fresh water resource with the treatment and management that is needed.

Thank you Mr. Chairman.

[From the New York Times, July 22, 1984]

PERIL IS SEEN FOR BABIES WHOSE MOTHERS ATE FISH WITH PCB'S

(By Daniel Goleman)

The infants of women who ate Lake Michigan fish contaminated with PCB's show subtle, "worrisome" signs of problems in their behavioral development such as sluggish emotional responses, a new study indicates.

The study, published in the current issue of the journal Developmental Psychology, is the first to find deficits in the children of women exposed to low levels of PCB's. The women who were studied ate an average of two to three meals of contaminated fish per month for 16 years.

PCB's, polychlorinated biphenyls, are chemicals that were widely used in electrical equipment and other industrial applications before they were banned in 1976. PCB's are man-made molecules that accumulate in fatty tissue and are believed to cause cancer. They do not decompose under bacterial or other biological action.

Predatory fish such as lake trout and salmon can have especially high concentrations of PCB's. Because of the cancer risk, pregnant women, nursing mothers, women of child-bearing age and young children have been advised in the past to limit their consumption of fish species likely to have high accumulations of PCB's.

"I would advise women of child-bearing age not to eat fatty fish like salmon and lake trout at all," said Joseph L. Jacobson, one of the researchers, "or else to cut off the fattier part or broil the fish, which removes most of the PCB's."

The researchers are cautious about the implications of their findings, since they do not yet have evidence that the problems will persist.

Moreover, although they went to great lengths to be sure that the effects they observed were due to PCB's, they note that other factors, including other toxic chemicals, could be the cause.

The effects of much higher levels of PCB's had already been observed in studies of pregnant women in Japan and Taiwan who had accidentally consumed rice oil contaminated by PCB's and other chemicals. Their infants showed a distinctive set of physical characteristics, and most were mentally retarded, sluggish and clumsy in their movements, and were generally apathetic.

313 INFANTS STUDIED

The current study suggests, however, that even exposure to low levels of PCB's can have detrimental effects.

The researchers interviewed 8,482 mothers the day after their babies were delivered in four hospitals in western Michigan. They compared infants of 71 women who reported eating no contaminated fish with those of 242 women who reported regularly eating fish from Lake Michigan, including species known to have PCB contamination.

The infants of the women who had eaten fish had a lower birth weight and smaller head circumference than the infants of women who had not.

On a standard test of infant development, the infants of women who had eaten fish showed a number of abnormal responses including jerky and unbalanced movements, sluggishness in response, and weak reflexes.

The study was done by Joseph L. Jacobson and Sandra W. Jacobson of Wayne State University in Detroit, Greta G. Fein of the University of Maryland, Pamela M. Schwartz of the University of Michigan and Jeffrey K. Dowler of Wayne State University.

Low levels of exposure to toxins, the researchers note, can produce different symptoms in different children, depending on genetic predispositions or other factors.

The patterns found in the infants whose mothers were exposed to PCB's would be considered worrisome by clinicians. Although the patterns would not necessarily mean that an infant would continue to have problems as it matured, a clinician would ordinarily monitor the child's development for signs of further problems.

The investigators are planning to retest the infants in the study when they reach age 4 to see if developmental problems emerge. They note that problems in infancy are often transitory and their long-term implications for development are uncertain.

Infants of the women who had the highest exposure to PCB's had the most worrisome range, according to the study; their behavior tended to be the most sluggish and depressed.

Because these deficits are subtle, the investigators say, they are often unnoticed in infants, and developmental problems that emerge later are unlikely to be traced back to the mother's exposure to a toxic substance.

CONTAMINATION IS DECLINING

CHICAGO, July 21.—Studies since 1975 have found a steady decline in the level of PCB's in fish from Lake Michigan, said Thomas J. Murphy, a DePaul University chemist and member of the Lake Michigan Federation, a private nonprofit group.

From 1972 to 1975 Coho salmon contained on average more than 10 parts of PCB's per million, and lake trout contained from 18 to 22, Mr. Murphy said. Data gathered in 1981 show lake trout measuring 6 parts per million, he said with a similar decline in salmon.

These levels, however, are still above the Federal Food and Drug Administration's limit of two parts per million in PCB's in fish.

Wisconsin, Illinois, Indiana, and Michigan, the states bordering Lake Michigan, issue warnings on fishing licenses against eating contaminated fish.

In New York State, the Hudson River contains PCB's, and Lakes Ontario and Erie have other chemical contaminants. The New York City Health Department recommends that people eat no more than one meal a month of New York State fresh-water fish, and that pregnant women, women of child-bearing age, nursing mothers and children under 15 years old eat no New York State fish at all.

PRENATAL EXPOSURE TO POLYCHLORINATED BIPHENYLS: EFFECTS ON BIRTH SIZE AND GESTATIONAL AGE

GRETA G. FEIN, Ph.D.
JOSEPH L. JACOBSON, Ph.D.
SANDRA W. JACOBSON, Ph.D.
PAMELA M. SCHWARTZ, Ph.D.
and
JEFFREY K. DOWLER, M.A.
Ann Arbor and Detroit, Mich.

From the School of Public Health, University of Michigan, and Wayne State University.

Reprinted from
THE JOURNAL OF PEDIATRICS
St. Louis

Vol. 105, No. 2, pp. 315-320, August, 1984
(Copyright © 1984, by The C.V. Mosby Company)
(Printed in the U.S.A.)

Prenatal exposure to polychlorinated biphenyls: Effects on birth size and gestational age

Polychlorinated biphenyls (PCBs), environmental pollutants that concentrate in the fatty tissue of predatory sports fish, cross the placenta in women exposed to ordinary dietary levels. Two hundred forty-two newborn infants whose mothers consumed moderate quantities of contaminated lake fish and 71 infants whose mothers did not eat such fish were examined during the immediate postpartum period. PCB exposure, measured by both contaminated fish consumption and cord serum PCB levels, predicted lower birth weight and smaller head circumference. Exposed infants were 160 to 190 gm lighter than controls, and their heads were 0.6 to 0.7 cm smaller. Head circumference was disportionately small in relation to both birth weight and gestational age. Control analyses showed that none of these effects was attributable to any of 37 potential confounding variables, including socioeconomic status, maternal age, smoking during pregnancy, and exposure to polybrominated biphenyls. These findings are consistent with earlier reports from studies in laboratory animals.

(J PEDIATR 105:315, 1984)

Greta G. Fein, Ph.D., Joseph L. Jacobson, Ph.D., Sandra W. Jacobson, Ph.D., Pamela M. Schwartz, Ph.D., and Jeffrey K. Dowler, M.A.
Ann Arbor and Detroit, Mich.

POLYCHLORINATED BIPHENYLS are a group of polycyclic chlorinated hydrocarbons, which achieved widespread industrial use because of their thermal stability, adhesiveness, and resistance to biodegradation. A world-wide pollutant, PCBs are lipophilic and poorly metabolized compounds that tend to concentrate in the fatty tissue of aquatic organisms feeding in contaminated waters. Consumption of PCB-contaminated fish from Lake Michigan has been found to predict PCB concentrations in maternal serum and milk.[1,2] Maternal serum values, in turn, predict cord serum PCB levels.[3-5] Lake Michigan fish have been implicated as a dietary source of PCB exposure in women of childbearing age and a source of transplacental exposure for their infants.

Evidence of fetotoxicity comes primarily from laboratory animal studies.[6,7] Ingestion of PCBs by rhesus mothers is associated with a greater incidence of abortions and resorptions and lower birth weights among liveborn offspring, even those conceived more than 12 months after maternal ingestion.[8,9] Ingestion by mouse dams is associated with smaller litter size and a higher rate of neonatal mortality.[10] The only evidence of human effects comes from studies of pregnant women in Japan and Taiwan who consumed rice oil accidentally contaminated with high concentrations of PCBs along with other compounds (e.g., polychlorinated dibenzofurans).[11,12] Infants exposed in utero tended to be small and to be born prematurely.[13,14] Follow-up studies reported growth impairment, an average IQ of 70, sluggishness, clumsy and jerky movement, apathy, and hypotonia.[15] The consequences of intrauterine exposure from ordinary dietary sources have not previously been investigated in humans.

PBB	Polybrominated biphenyl
PCB	Polychlorinated biphenyl

From the School of Public Health, University of Michigan, and Wayne State University.

Supported by Grant CR808520010 (to G.G.F.) from the Environmental Protection Agency.

Submitted for publication June 22, 1983; accepted Feb. 17, 1984.

Reprint requests: Greta G. Fein, Ph.D., College of Education, University of Maryland, College Park, MD 20742.

Table I. Control variables yielding differences for exposed versus nonexposed infants

	Exposed	*P*	*Nonexposed*
Overall contaminated fish consumption*			
Maternal prepregnancy weight (kg) ($\overline{X}$ ± SD)	62.0 ± 11.6	<0.10	66.1 ± 14.7
Type of delivery (% spontaneous)	67.4	<0.05	77.5
Alcohol prior to pregnancy (%)	54.2	<0.001	28.2
Alcohol during pregnancy (%)	22.7	<0.01	7.0
Caffeine† prior to pregnancy (%)	40.1	<0.10	28.2
Caffeine† during pregnancy (%)	22.7	<0.10	12.7
Cold medications during pregnancy (%)	28.6	<0.01	13.2
Cord serum PCB level‡			
Maternal age (yr) ($\overline{X}$ ± SD)	27.1 ± 5.3	<0.10	26.0 ± 4.2
Weight gain during pregnancy (kg) ($\overline{X}$ ± SD)	12.7 ± 4.6	<0.10	13.8 ± 4.6
Type of delivery (% spontaneous)	63.2	<0.10	73.5

*Exposed defined as ≥11.8 kg over 6 years, $n = 242$; nonexposed $n = 71$.
†Equivalent of >2 cups of coffee per day.
‡Exposed defined as ≥3.0 ng/mL, $n = 75$; nonexposed $n = 166$.

METHODS

Study participants were 242 infants born between July 1980 and December 1981 to women who reported moderate consumption of Lake Michigan fish, and 71 infants born during this period whose mothers ate no Lake Michigan fish. All but two participants were white, 52% were male, 43% were firstborn, and six were the larger members of twin pairs, none of whom died during infancy.

Dietary exposure. All newly delivered mothers in four hospitals located near Lake Michigan were asked to participate in a screening interview on the day after delivery. Women reported the amount of each species of Lake Michigan fish they consumed during the prior year and, if they ingested greater amounts at some time in the past, consumption rates for that period as well. Past consumption was considered significant because PCBs once ingested are difficult to eliminate. A weighted value was assigned to each fish species consumed, based on average contaminant levels reported for that species in Lake Michigan.[1] Overall contaminated fish consumption was defined as the weighted sum of annual Lake Michigan fish consumption in the present or past, whichever was greater. The amount of contaminated fish consumed during pregnancy was also recorded.

To ensure the participation of infants likely to have been exposed in utero to a broad range of PCB levels, the exposed group composed about three quarters of the sample and was limited to women who had consumed at least 11.8 kg contaminated fish over 6 years. The controls were selected at random from among the women who did not eat fish, and were distributed among the four participating hospitals in proportion to the number of exposed participants from each hospital. Although the mothers were not told that PCB exposure was the focus of the study, all assessment procedures were explained in detail, and women agreeing to participate gave comprehensive informed consent.

Laboratory analysis. Cord and maternal serum samples were analyzed at the Michigan Department of Public Health by means of packed-column gas chromatography.[1, 16] Quantification was provided by adapting the Webb-McCall method to a computer data system with Aroclors 1016 and 1260 used as calibration standards.[17, 18] Quality control over time was ensured by addition of a spiked sample of bovine serum with every batch of 10 samples, as well as the use of a glassware blank and a reagent blank. Virtually all of the samples matched to the Aroclor 1016 standard were below the laboratory's detection limit, presumably because the lower chlorinated isomers are more susceptible to degradation in the environment and to more rapid metabolism in the organism.[19] Values matched to the Aroclor 1260 standard were, therefore, used in the analyses reported. Serum PCB values were available for 196 mothers. Cord serum PCB and polybrominated biphenyl values were available for 241 infants.

Outcome variables. Birth weight was obtained from the hospital delivery record. Crown-heel length and head circumference were measured by project staff on the second day after delivery. Gestational age was based on the mother's report of her last menstrual period and on the Ballard Examination for Fetal Maturity, which estimates gestational age by assessing physical and neuromuscular maturity.[20] The Ballard examination was administered at 30 to 42 hours after birth to the 209 infants (163 fish-eating mothers, 46 controls) for whom it was possible to obtain maternal consent within this limited time. The

Table II. Adjusted birth size and gestational age measures by overall contaminated fish consumption and cord serum PCB level

	*Overall contaminated fish consumption**			*Cord serum PCB level†*		
	Non–fish eaters (n = 71)	*Fish eaters (n = 242)*	*P*	*<3 ng/mL (n = 166)*	*≥3 ng/mL (n = 75)*	*P*
Birth weight (kg)	3.66 ± 0.54	3.47 ± 0.53	<0.05	3.57 ± 0.54	3.41 ± 0.54	<0.05
Head circumference (cm)	35.48 ± 1.36	34.92 ± 1.31	<0.01	35.28 ± 1.18	34.63 ± 1.19	<0.001
Gestational age based on last menstrual period (wk)	40.82 ± 3.07	40.31 ± 2.97		41.03 ± 3.01	39.77 ± 3.06	<0.05
Gestational age (Ballard examination) (wk)	39.85 ± 1.42	39.15 ± 1.40	<0.01	39.41 ± 1.40	39.47 ± 1.41	
Neuromuscular maturity	19.96 ± 2.48	18.52 ± 2.44	<0.001	19.95 ± 2.42	19.00 ± 2.40	
Physical maturity	17.13 ± 2.25	16.67 ± 2.19		16.96 ± 2.14	16.94 ± 2.15	

Values represent mean ± SD.

*Adjusted for effects of maternal prepregnancy weight, type of delivery, and consumption of alcohol and caffeine prior to and during pregnancy and cold remedies during pregnancy.

†Adjusted for sex of infant, type of delivery, maternal weight gain during pregnancy, and maternal age.

staff members who examined the infant and interviewed the mother were unaware of maternal fish consumption and maternal and cord serum PCB levels.

Control variables. A comprehensive list of 73 potential confounding variables included data pertaining to demographic background, health history, pregnancy and delivery, obstetrical medication, and fetal exposure to other drugs, such as alcohol, caffeine, and nicotine. Because many of these mothers had been exposed to PBBs, a related environmental contaminant,[21] cord serum PBB level was also used as a control variable. To ensure sufficient variance in the case of dichotomous variables, such as marital status (married/unmarried) or parity (firstborn/later born), only those variables were included for which incidence in each category exceeded 15%. Given this criterion, it was possible to assess the effects of 37 potential confounding variables.

Statistical analyses. Analyses based on overall contaminated fish consumption compared two groups of infants: those whose mothers had consumed more than 11.8 kg over 6 years versus those whose mothers had not consumed contaminated fish. These two groups were first compared using t tests or chi-square tests, as appropriate, to determine whether they differed (at $P < 0.10$) on any of the 37 potential confounding variables. The two groups were then compared on each of the outcome measures (e.g., birth size, gestational age) using analysis of covariance,[22] controlling simultaneously for those potential confounding variables that had yielded between-group differences. A toxic effect was inferred if the group difference remained significant after adjustment for the effects of the control variables. The same procedure was used to compare two groups of infants determined by each of the other exposure measures. Infants whose mothers ate contaminated fish during pregnancy were compared with those whose mothers did not, and infants with cord serum PCB levels at or above the laboratory's detection limit (3.0 ng/mL) were compared with those whose levels were below this limit.

RESULTS

Degree of exposure. The 242 women who reported eating Lake Michigan fish consumed 6.7 ± 5.8 kg/yr (mean ± SD). Median consumption was 5.0 kg/yr, equivalent to about two salmon or lake trout meals per month (range 0 to 4). These women reported having eaten Lake Michigan fish for an average of 15.9 ± 9.1 years. During pregnancy their consumption rates declined to 4.1 ± 4.4 kg/yr.

Maternal serum PCB concentrations for the sample as a whole averaged 5.5 ± 3.7 ng/mL, which is comparable to those for other midwestern American samples.[23] Cord serum PCB levels averaged 2.5 ± 1.9 ng/mL. Although maternal contaminated fish consumption did not predict cord serum PCB level directly, contaminated fish consumption predicted maternal serum PCB level ($r = 0.37$, $P < 0.001$), which, in turn, predicted cord PCB level ($r = 0.41$, $P < 0.001$).

Evaluation of sampling bias. About two thirds of the mothers invited to participate in the study agreed to do so. Participants (P) and refusers (R) did not differ significantly in terms of either of the contaminated fish consumption measures, maternal age, marital status, birth class attendance, or sex or parity of infant. The participants were somewhat better educated than the refusers, 13.3 years of school (P) versus 12.7 (R), and somewhat higher in socioeconomic status,[24] 39.3 (P) versus 35.7 (R). Because

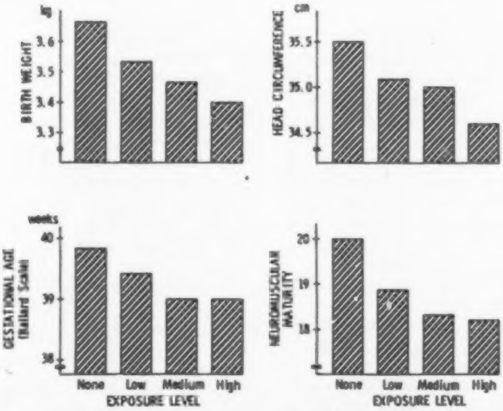


Figure. Dose-response relationships for birth weight, gestational age (Ballard examination), head circumference, and neuromuscular maturity by overall contaminated fish consumption. Group means were derived from analyses of covariance, in which they were adjusted for the effects of maternal prepregnancy weight, type of delivery, and consumption of alcohol and caffeine prior to and during pregnancy and cold remedies during pregnancy. Exposed infants were divided into three approximately equal groups: low exposure 2.0 to 3.4 kg/yr, medium 3.5 to 6.5 kg/yr, high 6.6 to 41.7 kg/yr.

the offspring of better educated and higher status women should be less prone to adverse neonatal outcomes, however, their proportionately greater representation in the exposed group can be assumed not to have biased the data in favor of finding toxic effects. Ninety percent of the infants designated at medical risk by hospital staff were among the offspring of fish-eating women, and all but one of their mothers agreed to participate. There is no evidence, however, that infants at risk were systematically underrepresented among the nonexposed mothers who agreed to participate.

Control variables. Table I shows group means or percentages for control variables found to be differentially distributed ($P < 0.10$) in exposed and nonexposed infants based on overall contaminated fish consumption and cord serum PCB level. The magnitudes of these between-group differences were consistently small. When calculated in terms of point-biserial or phi coefficients, most of the correlations ranged from 0.09 to 0.15, and none exceeded 0.22.

Neonatal outcomes. Overall contaminated fish consumption predicted smaller birth size on two measures, birth weight and head circumference, and a shorter gestational period as estimated by the Ballard examination (Table II). Infants born to women who had consumed contaminated fish averaged 190 gm less in birth weight, 0.6 cm less in head circumference, and 4.9 days less in gestational age. The lower Ballard scores were related primarily to greater neuromuscular immaturity among the exposed infants. All four outcomes were related to overall contaminated fish consumption in a dose-dependent fashion (Figure).

The head circumference of the exposed infants was significantly smaller ($P < 0.05$), even after birth weight and gestational age were statistically controlled. This finding suggests that the head size of these infants was, on average, disproportionately small in relation to both weight and gestation. Although fish consumption during pregnancy was highly correlated with overall fish consumption ($r = 0.79$, $P < 0.001$), consumption during pregnancy did not predict either birth size or gestational age and was related only to neuromuscular maturity (18.6 ± 2.4 exposed during pregnancy versus 19.3 ± 2.5, $P < 0.05$). Even with consumption during pregnancy statistically controlled, overall fish consumption continued to predict lower birth weight ($P < 0.05$), smaller head circumference ($P < 0.005$), earlier gestational age on the Ballard test ($P < 0.005$), and poorer neuromuscular maturity ($P < 0.05$).

Because contaminants other than PCBs could be responsible for the observed relationships between fish consumption and birth size or gestational age, cord serum PCB values were used to corroborate the findings based on fish consumption. Sex of infant was found to function as a suppressor variable in the relation of cord serum PCB level to birth weight, because of a tendency for males to be overrepresented among the more highly exposed infants in this sample (57.9% highly exposed versus 50.0%). Because infant boys tend to be heavier than girls ($P = 0.020$), the sex difference in PCB level masked the effect of cord PCBs on birth weight unless sex was included as a control variable in the analysis. With sex of infant and three potential confounding variables (Table I) statistically controlled, cord serum PCB level predicted lower birth weight, smaller head circumference, and shorter gestation based on reported last menstrual period (Table II). Infants with cord serum concentrations at or above the laboratory's detection limit averaged 160 gm less in birth weight, 0.7 cm less in head circumference, and 8.8 days less in gestational age. Head circumference was significantly smaller ($P < 0.01$) among newborn infants with detectable cord PCB levels, even when birth weight and gestational age were statistically controlled.

DISCUSSION

Despite the widespread distribution of PCBs in the aquatic environment and evidence of placental transfer to the fetus, our study is the first to assess the effects of PCB exposure at ordinary dietary levels on the human infant. In our sample of mothers who consumed contaminated Lake Michigan fish, intrauterine exposure was associated with reduced birth size on both the contaminated fish consumption and cord serum PCB measures of exposure. Exposed infants were 160 to 190 gm lighter than controls, a magnitude comparable to that reported by the Surgeon General for smoking during pregnancy.[23] In contrast to smoking, however, which primarily affects birth weight, head circumference was most directly affected by PCB exposure. Evidence of reduced birth size and shortened gestation in this chronically exposed sample is consistent with experimental studies in rhesus monkeys[8,9] and with research on acutely exposed humans in Japan.[14]

Smaller birth size was predicted from a composite of present and past contaminated fish consumption but not from consumption during pregnancy alone. This finding is consistent with the assumption that the more highly chlorinated PCB isomers (i.e., those matched to the Aroclor 1260 standard tested) are stored in human tissue over relatively long periods. The data suggest that, at low levels of exposure, the threat to the fetus is based more on gradual long-term bioaccumulation than exposure during pregnancy per se.

Because ethical considerations do not permit the random assignment of humans to experimental conditions, our study used a correlational design. Any of 37 potential confounding variables that were differentially distributed ($P < 0.10$) in exposed and nonexposed individuals were included as covariates in the statistical analyses. Because other control variables, such as socioeconomic status, maternal smoking, PBB exposure, and parity, were unrelated to exposure, it is very unlikely that they account for the adverse outcomes associated with contaminated fish consumption and cord serum PCB level. Acutely exposed Japanese infants with similar adverse neonatal outcomes exhibited growth impairment and motoric and cognitive deficits in later infancy.[15] Follow-up assessments are needed to determine whether the effects reported also have implications for subsequent physical and intellectual development.

We thank Mason Barr, Jr., for critical evaluation of early drafts of this report; Joel Ager, Jr., for statistical consultation; Wayland Swain, Nelson Thomas, and Harold Humphrey for assistance in developing the project; Gail Brumitt, Patricia Yaros, Carol Alexander, and Gwen Hendrickse, who collected the data in the field; Gregory Proulx for assistance in the statistical analyses; and the physicians, hospital personnel, and parents who cooperated in providing the data.

REFERENCES

1. Jacobson SW, Jacobson JL, Schwartz PM, Fein GG: Intrauterine exposure of human newborns to PCBs: Measures of exposure. *In* D'Itri FM, Kamrin M, editors: PCBs: Human and environmental hazards. Boston, 1983, Butterworth, pp 311-343.
2. Schwartz PM, Jacobson SW, Fein GG, Jacobson JL, Price HA: Lake Michigan fish consumption as a source of polychlorinated biphenyls in human cord serum, maternal serum, and milk. Am J Public Health 73:293, 1983.
3. Jacobson JL, Fein GG, Jacobson SW, Schwartz PM, Dowler JK: The transfer of polychlorinated biphenyls and polybrominated biphenyls across the human placenta and into maternal milk. Am J Public Health 74:376-379, 1984.
4. Kodama H, Ota H: Studies on the transfer of PCB to infants from their mothers. Jpn J Hyg 32:567, 1977.
5. Masuda Y, Kagawa R, Kuroki H, et al: Transfer of polychlorinated biphenyls from mothers to foetuses and infants. Bull Environ Contam Toxicol 16:543, 1978.
6. Merson MH, Kirkpatrick RL: Reproductive performance of captive white-footed mice fed a PCB. Bull Environ Contam Toxicol 16:392, 1976.
7. Villeneuve DC, Grant DL, Phillips WEJ, Clark ML, Clegg DJ: Effects of PCB administration on microsomal enzyme activity in pregnant rabbits. Bull Environ Contam Toxicol 6:120, 1971.
8. Barsotti DA, Marler RJ, Allen JR: Reproductive dysfunction in rhesus monkeys exposed to low levels of polychlorinated biphenyls (Aroclor 1248). Food Cosmet Toxicol 14:99, 1976.
9. Allen JR, Barsotti DA, Carstens LA: Residual effects of

polychlorinated biphenyls on adult nonhuman primates and their offspring. J Toxicol Environ Health 6:55, 1980.
10. Chou SM, Miike T, Payne WM, Davis GJ: Neuropathy of "spinning syndrome" induced by prenatal intoxication with a PCB in mice. Ann NY Acad Sci 320:373, 1979.
11. Higuchi K, editor: PCB poisoning and pollution. New York, 1976, Academic Press.
12. Wong KC, Hwang MY: Children born to PCB poisoned mothers. Clin Med (Taipei) 7:83, 1981.
13. Monographs on the evaluation of the carcenogenic risk of chemicals to humans: Polychlorinated biphenyls and polybrominated biphenyls. Lyon, France, 1978, International Agency for Research on Cancer.
14. Funatsu I, Yamashita F, Ito Y, et al: Polychlorbiphenyls (PCB)-induced fetopathy. Kurume Med J 19:43, 1972.
15. Harada M: Intrauterine poisoning: Clinical and epidemiological studies and significance of the problem. Bull Inst Constit Med, Kumamoto University 25(Suppl), 1976.
16. Needham LL, Burse VW, Price HA: Temperature-programmed gas chromatographic determinants of polychlorinated and polybrominated biphenyls in serum. J Assoc Off Anal Chem 64:1131, 1981.
17. Webb RG, McCall AC: Quantitative PCB standards for electron capture gas chromatography. J Chromatogr Sci 11:366, 1973.
18. Sawyer LD: Quantitation of polychlorinated biphenyl residues by electron capture gas-liquid chromatography. Reference material characterization and preliminary study. J Assoc Off Anal Chem 61:272, 1978.
19. Kimbrough RD: The toxicity of polychlorinated polycyclic compounds and related chemicals. CRC Crit Rev Toxicol 2:445, 1974.
20. Ballard JL, Novak KK, Driver M: A simplified score for assessment of fetal maturation of newly born infants. J PEDIATR 95:769, 1979.
21. Weil WB, Spencer M, Benjamin D, Seagull E: The effect of polybrominated biphenyl on infants and young children. J PEDIATR 98:47, 1981.
22. Winer BJ: Statistical principles in experimental design. New York, 1971, McGraw-Hill.
23. Humphrey HEB: Population studies of PCBs in Michigan residents. *In* D'Itri FM, Kamrin M, editors: PCBs: Human and environmental hazards. Boston, 1983, Butterworth, pp 299-310.
24. Hollingshead AB, Redlich FC: Social class and mental illness. New York, 1958, Wiley.
25. Smoking and health: Report of the Surgeon General. US Department of Health, Education and Welfare, Publ. No. (PHS) 79-50066. Washington, DC, 1979, US Government Printing Office.

STATEMENT OF TIMOTHY KUBIAK, FISH AND WILDLIFE BIOLOGIST, U.S. FISH AND WILDLIFE SERVICE, HABITAT RESOURCES FIELD OFFICE, GREEN BAY, WISCONSIN, BEFORE SENATOR ROBERT W. KASTEN, JR. AT A FIELD HEARING IN GREEN BAY, WISCONSIN, CONCERNING GREEN BAY/LAKE MICHIGAN COLONIAL WATERBIRDS

JULY 10, 1984

MR. CHAIRMAN, I AM TIMOTHY KUBIAK, FISH AND WILDLIFE BIOLOGIST, U.S. FISH AND WILDLIFE SERVICE (SERVICE). I AM A STAFF MEMBER OF THE HABITAT RESOURCES FIELD OFFICE HERE IN GREEN BAY, WISCONSIN. I APPRECIATE THE OPPPORTUNITY TO APPEAR BEFORE YOU TODAY. THE PURPOSE OF MY TESTIMONY IS TO PRESENT TO YOU TECHNICAL DATA WE RECENTLY OBTAINED ON GREEN BAY COLONIAL BIRDS, WITH SPECIFIC EMPHASIS ON THE FORSTER'S TERN.

BEFORE DISCUSSING OUR FINDINGS I WOULD LIKE TO BRIEFLY DESCRIBE OUR PROGRAM RESPONSIBILITIES. THE GOAL OF THE SERVICE'S HABITAT RESOURCES PROGRAM IS TO CONSERVE, PROTECT AND ENHANCE FISH AND WILDLIFE AND THEIR HABITATS AND FACILITATE BALANCED DEVELOPMENT OF THE NATION'S NATURAL RESOURCES BY TIMELY AND EFFECTIVE PROVISION OF FISH AND WILDLIFE INFORMATION AND RECOMMENDATIONS. IN ACCORDANCE WITH THE FISH AND WILDLIFE COORDINATION ACT AND OTHER FEDERAL STATUTES, THE SERVICE INTERACTS WITH OTHER FEDERAL AND STATE AGENCIES TO PROVIDE REVIEWS, RECOMMENDATIONS AND REPORTS ON KNOWN OR POTENTIAL FISH AND WILDLIFE IMPACTS RESULTING FROM VARIOUS WATER DEVELOPMENT-RELATED ACTIVITIES, INCLUDING POLLUTION AND CHEMICAL CONTAMINATION.

SOME OF OUR ACTIVITIES MORE SPECIFICALLY RELATED TO WATER QUALITY AND CONTAMINANT PROBLEMS INCLUDE PARTICIPATING IN THE

CONTINUING WATER QUALITY PLANNING PROCESS OF THE STATE OF WISCONSIN, PROVIDING REVIEWS OF PROPOSED REGULATORY ACTIONS AND PARTICIPATING IN SPECIAL STUDIES TO BETTER DEFINE POTENTIAL PROBLEMS. IN 1983 WE PARTICIPATED WITH OTHER AGENCIES ON THE "FOX RIVER TASK FORCE" WHICH ISSUED ITS FINAL REPORT IN JULY 1983 . THIS REPORT FOCUSED ON TOXIC SUBSTANCES CONCERNS IN THE LOWER FOX RIVER AND GREEN BAY.

ALSO IN 1983, WE UNDERTOOK A COOPERATIVE STUDY ON THE FORSTER'S TERN. THE UNIVERSITY OF WISCONSIN SEA GRANT INSTITUTE AND OUR AGENCY WERE THE PRINCIPAL INVESTIGATING AGENCIES, WITH ADDITIONAL SUPPORT PROVIDED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES AND THE GREEN BAY METROPOLITAN SEWERAGE DISTRICT. THE STUDY WAS UNDERTAKEN FOR A NUMBER OF REASONS: 1) PREVIOUS FIELD DATA FOR FORSTER'S TERNS ON GREEN BAY INDICATED POOR REPRODUCTION; 2) TWO BLACK-CROWNED NIGHT HERONS FOUND SICK IN 1978 AND CHEMICALLY CHARACTERIZED IN LATE 1982 WERE FOUND TO CONTAIN VARIOUS POLYCHLORINATED DIBENZO-P-DIOXINS. IN ONE BIRD, 2,3,7,8 - TETRACHLORODIBENZOFURAN WAS FOUND AND CERTAIN POLYCHLORINATED BIPHENYLS (PCB) KNOWN TO BE HIGHLY TOXIC WERE ALSO PRESENT; AND 3) SINCE 1973 A TOTAL OF 6 SPECIES OF BIRDS HAVE BEEN DOCUMENTED AS HAVING CONGENITAL ANOMALIES (BIRTH DEFECTS). THESE SPECIES ARE HERRING GULL, VIRGINIA RAIL, COMMON TERN, FORSTER'S TERN, RING-BILLED GULL AND DOUBLE-CRESTED CORMORANT. EXCLUDING THE RING-BILLED GULL, THE OTHER 5 SPECIES ALL HAVE HAD BILL DEFECTS, POPULARLY KNOWN AS CROSSED-BILL SYNDROME.

THE PURPOSE OF THE FORSTER'S TERN STUDY WAS TO DETERMINE WHETHER THE REPRODUCTIVE SUCCESS OF THE FORSTER'S TERN ON GREEN BAY WAS DIFFERENT FROM AN INLAND COLONY OF FORSTER'S TERNS ON LAKE POYGAN AND FURTHER, WHETHER ANY DIFFERENCES OBSERVED COULD BE ATTRIBUTED TO CONTAMINANTS. SINCE CONTAMINANTS WERE SUSPECTED OF CAUSING REPRODUCTIVE PROBLEMS, THE EXPERIMENTAL DESIGN ASSUMED THAT THE GREEN BAY COLONY WAS "CONTAMINATED" AND THE LAKE POYGAN COLONY WAS OUR CLEAN, "CONTROL".

THE THREE MAJOR COMPONENTS OF THE STUDY WERE FIELD OBSERVATION, A CONTROLLED EGG INCUBATION EXPERIMENT AND CHEMICAL ANALYSES OF EGGS FROM BOTH COLONIES. OUR GREEN BAY FIELD OFFICE SERVED AS STUDY COORDINATOR. THE ARTIFICIAL INCUBATION EXPERIMENT WITH EGGS FROM BOTH COLONIES WAS PERFORMED AT THE U.S. FISH AND WILDLIFE SERVICE'S NATIONAL WILDLIFE HEALTH LABORATORY, IN MADISON, WISCONSIN. CHEMICAL ANALYSES WERE PERFORMED AT OUR COLUMBIA NATIONAL FISHERIES RESEARCH LABORATORY IN COLUMBIA, MISSOURI. ADDITIONAL ANALYSES OF CHICKS THAT HATCHED IN THE ARTIFICIAL INCUBATION EXPERIMENT WERE CONDUCTED AT OUR PATUXENT WILDLIFE RESEARCH CENTER IN LAUREL, MARYLAND. THE UNIVERSITY OF WISCONSIN SEA GRANT INSTITUTE WAS RESPONSIBLE FOR FIELD MONITORING.

ALTHOUGH WE ARE CONTINUING TO ANALYZE STUDY DATA PRIOR TO ISSUING A FINAL REPORT, WE CAN SUMMARIZE THE FOLLOWING RESULTS AT THIS TIME.

FIELD EXPERIMENT

- THE MEAN NUMBER OF FLEDGED YOUNG PER PAIR OF ADULTS WAS SIGNIFICANTLY DIFFERENT BETWEEN LAKE POYGAN AND MONITORED NESTS ON GREEN BAY. OVERALL, THE DIFFERENCE BETWEEN COLONIES SHOWED THAT LAKE POYGAN PRODUCED 1 YOUNG PER PAIR MORE THAN GREEN BAY.

- EGGS WERE SWAPPED BETWEEN ONE OF OUR TWO GREEN BAY COLONIES AND THE LAKE POYGAN COLONY AND VICE VERSA. THIS ALLOWED US TO MONITOR THE FATE OF GREEN BAY EGGS BEING INCUBATED BY LAKE POYGAN ADULTS. GREEN BAY EGGS HATCHED IN SIGNIFICANTLY HIGHER NUMBERS WHEN INCUBATED BY LAKE POYGAN ADULTS THAN BY GREEN BAY BIRDS, SUGGESTING THAT ABERRANT BEHAVIOR IN GREEN BAY BIRDS MAY BE AN IMPORTANT FACTOR IN REPRODUCTIVE SUCCESS.

- THE INCUBATION PERIOD OF GREEN BAY EGGS IN THE FIELD WAS SIGNIFICANTLY LONGER THAN AT LAKE POYGAN INDICATING DELAYED EMBRYONIC DEVELOPMENT.

ARTIFICIAL INCUBATION

- OF 19 GREEN BAY EGGS ARTIFICIALLY INCUBATED, ONLY 7 (37 PERCENT) HATCHED COMPARED TO 15 OUT OF 20 (75 PERCENT) ARTIFICIALLY INCUBATED LAKE POYGAN EGGS. THIS WAS A STATISTICALLY SIGNIFICANT DIFFERENCE.

- MEAN WEIGHTS OF CHICKS THAT HATCHED FROM GREEN BAY WERE SIGNIFICANTLY LOWER THAN CHICKS FROM LAKE POYGAN. THIS

INDICATES GROWTH RETARDATION IN DEVELOPING EMBRYOS FROM GREEN BAY.

- THE RATIO OF LIVER WEIGHT TO BODY WEIGHT WAS SIGNIFICANTLY HIGHER IN GREEN BAY CHICKS THAN IN LAKE POYGAN CHICKS INDICATING HEPATOMEGALY (LIVER ENLARGEMENT).

- FOR BOTH THE GREEN BAY AND LAKE POYGAN COLONIES SOME EGGS WHICH DID NOT HATCH CONTAINED DEAD EMBRYOS EXHIBITING CHICK EDEMA DISEASE. DIFFERENCES BETWEEN THE COLONIES WERE NOT SIGNIFICANTLY DIFFERENT.

- FOR THOSE CHICKS THAT HATCHED, THE LEVEL OF THE ENZYME, ARYL HYDROCARBON HYDROXYLASE (AHH) WAS SIGNIFICANTLY HIGHER IN GREEN BAY CHICK LIVERS. AHH INDUCTION IS A KEY BIOCHEMICAL INDICATOR FOR THE PRESENCE OF DIOXINS, FURANS, PCBS AND OTHER ORGANIC COMPOUNDS.

- FOR THOSE CHICKS THAT HATCHED, THOSE FROM GREEN BAY HAD FEMUR (UPPER LEG BONE) LENGTHS THAT WERE MORE THAN 9 PERCENT SHORTER THAN LAKE POYGAN. THIS RESULT WAS SIGNIFICANTLY DIFFERENT BETWEEN COLONIES AND AGAIN SHOWS GROWTH SUPPRESSION. THE HUMERUS (UPPER WING BONE) LENGTH DIFFERENCES WERE VERY CLOSE TO BEING SIGNIFICANTLY DIFFERENT BETWEEN COLONIES. AS WITH THE FEMURS, THE HUMERUS BONE LENGTHS OF THE GREEN BAY CHICKS WERE SHORTER.

- TWO EMBRYOS THAT DID NOT HATCH FROM THE 19 GREEN BAY EGGS WERE DEFORMED. BOTH EMBRYOS HAD BILL DEFECTS AND ONE ALSO HAD AN UNDERDEVELOPED LOWER LEG AND FOOT.

EGG CHEMISTRY 7

- THERE WERE STATISTICALLY SIGNIFICANT DIFFERENCES IN THE FOLLOWING CHEMICAL RESIDUES FROM EGGS FROM THE TWO COLONIES, WITH EGGS FROM THE GREEN BAY COLONIES HAVING HIGHER CONCENTRATIONS:

  1. 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN
  2. HEXACHLORODIBENZO-P-DIOXIN
  3. TOTAL CHLORODIBENZO-P-DIOXINS
  4. TOTAL PCBS

- NON-ORTHO,ORTHO' PCB ISOMERS AND CHLORINATED DIBENZOFURANS WERE ALSO FOUND IN EGGS FROM BOTH COLONIES. STATISTICALLY SIGNIFICANT DIFFERENCES WERE NOT APPARENT. ADDITIONAL CHEMICAL ANALYSES FOR OTHER CONTAMINANTS ARE PRESENTLY BEING PERFORMED ON THE SAME EGGS.

ALTHOUGH THE ABOVE RESULTS ARE CONSIDERED PRELIMINARY, WE HAVE SUFFICIENT CONFIDENCE IN THESE DATA TO DRAW THE FOLLOWING CONCLUSIONS. THE ENTIRE STUDY WILL UNDERGO FORMAL PEER REVIEW PRIOR TO FINALIZATION AND PUBLICATION IN A REFEREED SCIENTIFIC JOURNAL.

1. THERE IS CLEAR IMPAIRMENT OF THE REPRODUCTIVE CAPACITY OF FORSTER'S TERNS NESTING ON GREEN BAY.

2. ALL BIOLOGICAL PARAMETERS TESTED PRODUCED RESULTS THAT APPEAR CONSISTENT WITH THE KNOWN EFFECTS OF

2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN AND ITS APPROXIMATE CHEMICAL STEREOISOMERS.

3. THERE IS A CLEAR DIFFERENCE IN RESIDUAL CONCENTRATIONS OF DIOXINS AND PCBS IN EGGS SAMPLED FROM LAKE POYGAN AND GREEN BAY COLONIES.

4. DIOXINS, PCBS AND POSSIBLY FURANS CANNOT BE DISCOUNTED AS CAUSATIVE FACTORS IN THE REPRODUCTIVE IMPAIRMENT OF NESTING FORSTER'S TERNS ON GREEN BAY.

THIS ENDS MY PREPARED TESTIMONY. I WOULD BE PLEASED TO ANSWER ANY QUESTIONS AT THIS TIME.

STATEMENT OF MICHAEL MAC, RESEARCH FISHERY BIOLOGIST, U.S. FISH AND WILDLIFE SERVICE, GREAT LAKES FISHERY LABORATORY, ANN ARBOR, MICHIGAN BEFORE SENATOR ROBERT W. KASTEN, JR. AT A FIELD HEARING IN MILWAUKEE CONCERNING CONTAMINANT IMPACTS ON THE FISHERY RESOURCES OF THE GREAT LAKES.

August 27, 1984

Mr. Chairman, I am Michael Mac, Fishery Research Biologist, U.S. Fish and Wildlife Service. I am a staff member in the section of Physiology and Contaminant Chemistry within the Great Lakes Fishery Laboratory, in Ann Arbor, Michigan. I appreciate the opportunity to appear before you to present our research findings concerning contaminants in the Great Lakes.

The Great Lakes Fishery Laboratory is a biological research facility whose mission is to develop a technical basis for assessing, protecting, enhancing and rehabilitating the fishery resources of the Great Lakes. Our functions include studying the biology and dynamics of fish populations and determining how these populations are affected by fishing and habitat alteration. In the section of Physiology and Contaminant Chemistry, we are investigating the impact of chemical contamination on the biota of the Great Lakes. This impact is measured using field studies, controlled laboratory experiments, and also routine monitoring of contaminants present in fish tissues.

Since the early 1970s, much of our research has centered on the effects that contaminants may have on lake trout rehabilitation in the Great Lakes. Rehabilitation has been particularly difficult in Lake Michigan where extensive stocking of hatchery trout since 1965 has yet to result in significant numbers of naturally produced fish. Because of the high concentrations of organochlorine contaminants found in fish from Lake Michigan, we designed our research to look at the potential effects of this contamination on lake trout reproduction. We conducted a series of studies looking at survivability of eggs of lake trout and the influence of contaminants on the growth, health, and performance of fry.

In 1980, we found that the offspring of southern Lake Michigan adult lake trout had significantly lower survival rates than not only offspring from hatchery broodstock, but also than those of either Lake Superior or Lake Huron origin. Our findings were dramatic--fry hatched from eggs taken from southern Lake Michigan adults suffered over 95% mortality within 5 months of hatching. This compares with 48, 45, and 54 percent mortality for fry from Hatchery, Lake Superior and Lake Huron origins, respectively. The much higher survival of fry from Lakes Huron and Superior is notable because there is evidence of natural reproduction by lake trout in these two lakes. Eggs from all four sources tested were incubated at different sites using natural waters from Lakes Michigan, Huron and Superior, but regardless of the incubation water, the near total mortality of Lake Michigan lake trout fry was observed at all sites. These results indicate that something in the eggs from Lake Michigan, possibly maternally transferred contaminants, was responsible for their poor survival. Newly hatched Lake Michigan lake trout fry from this study were found to contain 5.0 ug/g of PCB's, 2.5 ug/g of total DDT 0.16 ug/g dieldrin and 2.0 ug/g of toxaphene. In subsequent tests in 1981 through 1983, we again observed significantly higher mortality in progeny of Lake Michigan trout than in progeny from other sources, although the severity of this mortality was less than that previously observed. We believe that environmental contaminants are at least in part responsible or this poor survival because 1) residues of contaminants such as PCBs in southern Lake Michigan lake trout are an order of magnitude higher than those in trout from Lakes Superior and Huron, 2) most of the mortality occurred in the young fry at the developmental stage when they were switching from an internal (yolk sac) to an external food source. Mortality to fish during this developmental period has been previously observed and is suspected of being due to high concentrations of contaminants in the yolk sac. Experiments examining the role of contaminants in the survival of lake trout eggs and fry are continuing.

The recent discovery of tumors in bullheads caught in a tributary of Lake Erie again implicates environmental contamination as a threat to fish populations in the Great Lakes. Dr. Paul Baumann of the Fish and Wildlife Services' Columbia National Fisheries Research Laboratory reported that 1/3 of the bullheads over 3 years old in the Black River had liver tumors. Histological examination and classification of the types of tumors found, is currently being conducted. These findings as well as other reports of tumors in fish from the Niagara River and from harbors in Lake Ontario prompted a joint research venture by the Great Lakes Fishery Laboratory and the Columbia National Fisheries Research Laboratory to look at tumor incidence in several areas of the Great Lakes. This research, which began this summer, will also include in depth chemical and histological analyses of fish and laboratory exposures of fish to contaminants found in sediments collected from sampling sites. This information will allow us to deduce whether chemical contaminants are the cause and if so, what contaminants are most critical. Although no chemical or histological analysis has been carried out as yet, gross examination of fish indicates that tumors are present in all three of the polluted tributaries sampled so far; these are the Fox and Menominee Rivers of Green Bay and the Cuyahoga River in Cleveland. Tumor incidence from each of our polluted sites will be determined after histological examination and this incidence will be compared with that observed in fish populations from a clean, reference site.

The contamination of bottom sediments in many rivers, harbors, and connecting channels poses another threat to the fishery resources of the Great Lakes. The problem is complicated by the fact that many of these areas must be dredged to maintain shipping channels. Sediments proposed for dredging need to be evaluated for the presence of bioavailable contaminants and the potential for toxicity to the biota so that the dredged material can be disposed of properly. Sediment evaluation is not easily accomplished however, because currently no standardized procedure exists for evaluating material dredged from freshwater systems. Decisions on whether to dispose of sediments in the open lake or in a confined facility are made based on chemical analyses of bulk sediment using criteria that are largely untested. In response to this lack of a standardized test, our laboratory, in conjunction with the USEPA Great Lakes National Program Office, initiated research to develop a sediment bioassay. We adapted a bioassay test from the ocean dumping guidelines that measures bioaccumulation of contaminants in organisms exposed to the sediments. This procedure tests sediments that may not be acutely toxic to aquatic organisms, but are suspected of containing persistent contaminants. In our 10-day bioassay, we found that test organisms were capable of accumulating significant amounts (up to 12x the sediment concentrations) of PCBs from sediments that contained only 0.21 ug/g (ppm) PCBs. This is significant in that this level of PCBs in sediment is 1/5 of the value currently allowed for disposal in open water. Indeed much more research needs to be done before practices of sediment evaluation are truly protective of the fishery resources.

Chemical contamination of fish in the Great Lakes is not limited to more commonly discussed chemicals such as PCBs, DDT and Hg. Using gas chromatography/mass spectrometry analytical techniques, chemists at our laboratory have tentatively identified 476 organic compounds in Great Lakes fish tissue. By comparison, only 8 compounds could be identified in the same species of fish taken from a hatchery environment and not exposed to Great Lakes waters. The chemicals found included polynuclear aromatic hydrocarbons, many of which are potentially carcinogenic; and numerous halogenated pesticides and industrial type compounds. Over half of the compounds are believed to be present as a result of man's activities and yet the toxicity of most of the compounds to aquatic organisms is unknown. Research to identify which of the 476 compounds may pose the greatest hazard to biota is currently underway.

In conclusion, I would like to point out that these examples are but a few of the many contaminant related problems facing the Great Lakes system. Although researchers are continually improving analytical capabilities, developing more sensitive tests, and adding daily to our knowledge of aquatic toxicology, the great size of the lakes, their slow flushing rates, and the subtle ways in which minute quantities of contaminants may affect aquatic organisms would appear to make our research job a very complex one. However, the past effectiveness of research and regulatory efforts in reducing DDT levels in Lake Michigan fish by 95% and PCBs by about 60% to date serve as strong evidence that the problems can be addressed and solved.

Mr. Chairman this concludes my prepared statement. I will be glad to answer any questions you might have.

STATEMENT BY SENATOR ALAN CRANSTON
BEFORE THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
REGARDING REAUTHORIZATION OF THE CLEAN WATER ACT

March 27, 1985

Mr. Chairman, I appreciate the opportunity to appear before the Senate Environment and Public Works Committee Subcommittee on Environmental Pollution to testify in support of reauthorization of the Clean Water Act, and in particular the sewage treatment construction grants program.

Since the passage of the Clean Water Act in 1972, we have made substantial progress in cleaning up our nation's waters. California's experience clearly demonstrates the effectiveness of this federal program.

Today 99 percent of California's lakes meet water quality goals.

In 1972, 86 percent of the state's stream miles fully supported their designated uses. By 1982, 93 percent of the stream miles fully supported their designation.

Additionally, by 1982, 95 percent of the state's estuaries and 98 percent of the oceans supported their designated use.

Municipal compliance with sewage discharge permits rose from 34 percent in 1972 to 91 percent in 1982.

Compliance by industries with waste water discharge permits rose to 98 percent during this period.

This is impressive progress, especially in light of the fact that California's population increased 13 percent during this time, necessitating sewer service to an additional 2.6 million people.

But major problems remain. The State Water Resources Board which administers the sewage treatment construction grants program in California indicates the state needs $6 billion over the next 15 years to bring municipal facilities into compliance and meet growth demands.

Enactment of the Reagan Administration's proposal to phase out this program by 1990 would leave many California communities without the funds they need.

The State of California favors continuation of the construction grants program at the current $2.4 billion level. This program already reflects a significant reduction in the level of federal funds from the 1970's. Additionally in 1981 we cut the share of federal funding from 75 percent to 55 percent and limited the types of projects eligible.

I question the desirability of eliminating the direct federal grant program. Nonetheless recognizing the federal deficit, a program of federal seed money to help establish state water pollution control revolving funds as proposed in S. 652 represents a workable compromise between a federal grant program and no federal support at all. However, California is concerned that the timetable suggested in S. 652, continuing the wastewater construction grants program at the current $2.4 billion annual level only through 1988, then in 1989 starting the phase in of a program of federal seed money for state revolving funds, does not allow for an efficient transition. Thus, I hope the Committee will look closely at a longer phase in period.

Mr. Chairman, in the rest of my testimony I would like to comment on some specific needs of certain California communities.

The City of Avalon located on Catalina Island off the Los Angeles coast desparately needs a new sewage treatment plant. The existing facility was designed for an average daily flow of 500,000 gallons and a peak flow of 1 million gallons per day. The average daily flow during the middle of the summer, however, goes as high as 800,000 gallons per day, with peak flows ranging as high as 1.6 million gallons. Twice during the summer of 1983 beaches were closed in and around Avalon as a result of raw sewage flowing into the ocean.

The immediate problem is that Avalon's treatment plant is in violation of state and federal waste discharge requirements which call for 30 parts per million of suspended solids. In the winter, Avalon's effluent is only about 10 parts per million, but in the summer it reaches 50 parts per million during the height of the tourist season. The State of California has determined that the Avalon improvements to the publicly owned treatment works are eligible but does not expect to be able to fund the project before 1987. With the city's entire economy based on tourism, the improvements -- totally beyond the city's capability of funding alone -- are an absolute economic necessity.

In northern Santa Cruz County, the San Lorenzo Valley Water District has proposed a project to address serious public health and water quality problems. The region is under a prohibition for on-site systems and the area will have to stop using septic tanks by July 1986. Because of this situation, the state has placed the project on its Class A priority list. However, the project was not funded last year because of unresolved environmental questions and lack of affordability. Nonetheless something has to be done. One alternative that may pose a partial solution to the problem would be an amendment to the Clean Water Act to permit the project sponsor to adopt a system of charges which imposes a lower charge for low-income residential users. It's my understanding that a large number of people to be served are retired people living on fixed incomes.

Mr. Chairman, the City of Oakland has for a number of years worked to improve the quality of Lake Merritt, a salt water lake in the downtown area of the city. EPA has previously provided federal funds for a study of the Lake Merritt situation and California has identified Lake Merritt as its number 2 priority for funding under the clean lakes program. However, section 314(a)(1) of the Clean Water Act refers specifically to fresh water thereby preventing the state from funding Lake Merritt cleanup under the clean lakes program. I urge the Committee to consider amending this section to delete reference to fresh water so that saline as well as fresh water lakes are eligible for grants under the existing authorization for section 314.

Mr. Chairman, there are two research projects dealing with the problem of sludge underway in California which I want to bring to the Committee's attention. One is sponsored by the Orange County Sanitation Districts; the other by the San Diego Regional Water Reclamation Agency.

For some time, the Orange County Santitation Districts have been working with the California Institute of Technology and the National Oceanic and Atmospheric Administration in the design of a project to study the effects on the environment and human health of a controlled sludge discharge by pipeline to the deep ocean. The Orange County Santitation Districts are seeking a five year research permit to continue this research under the supervision of the Environmental Protection Agency.

Under Orange County's proposal, all of the construction funds that would be necessary, estimated to be approximately $15 million, would be supplied by Orange County Santitation Districts. This research undertaking would therefore be of absolutely no cost to the federal government, although the cooperation of EPA and NOAA would be needed to determine the specific monitoring to be undertaken. It is contemplated that the gathering and analysis of data would not be undertaken by Sanitation District personnel, but independently administered and involve NOAA, EPA, state and regional regulatory agencies as well as Caltech and the Southern California Coastal Water Research Project to ensure the validity of the experimental undertaking.

Mr. Chairman, I recognize that the disposal of sludge in the ocean is a controversial matter. However, this research experiment would provide reliable and useful data to make an informed judgment on this particular option for the handling of sludge.

The San Diego Regional Water Reclamation Agency located in Santee is also engaged in promising research related to the handling of sludge. The agency has developed a completely new concept for reclaiming wastewater. The process known as CCBA (pronounced See-ba) uses clay, water alum and polymer poly-acrylic acid to produce a lightweight concrete which can be used as building material. The reclaimed water can be used for agricultural irrigation and recreational purposes such as manmade lakes.

Unlike other wastewater treatment technologies, there is no sludge or ash to dispose of from a CCBA (See-ba) water treatment plant. The process has been effective in over 14 months of operations of a 100,000 gallon per day demonstration facility. Now to demonstrate commercial feasibility the process needs to be tested with a plant of 3 million gallons per day capacity. The cost to construct such a facility at the existing Santee site and operate it for 6 months would be $3 million. This research is unlikely to be undertaken without federal assistance.

Mr. Chairman, also important to my state is the proposal for a study, to be conducted by EPA in consultation with the city and county of Los Angeles, on the problem of corrosive effects of sulfides in collection and treatment systems. This is a phenomenon which appears to occur only in hot, dry climates and which, if answers are not found, could jeopardize millions of dollars in federal, state and local dollars invested in sewers. The corrosion does not seem to be caused by industrial discharge but is a result of a combination of sulfur, naturally occurring in the water with hydrogen. It's my understanding that $2 million is needed for this study.

Mr. Chairman, I would also like to mention a problem brought to my attention by the East Bay Municipal Utilities District which provides waste treatment services to most of the communities on the east side of San Francisco Bay.

Although EBMUD routinely does better than the federal standards and operates one of the most successful pretreatment programs in the country, on certain days during the rainy season the district exceeds secondary standards because the system is unable to accommodate the storm water which enters the system.

Although these events only occur about 10 times a year, their effect is enormous. In EBMUD, the primary treatment portion of the treatment plant is capable of treating a maximum flow of 300 mgd, the secondary system can handle a maximum of 160 mgd, the interceptor system leading to the plant is capable of carrying flows of up to 300 mgd. Flows higher than this overflow from the interceptor system and from the collection systems feeding into the interceptors. It is estimated that if the collection system were capable of carrying all storm water during heavy storms, the maximum flow would approach 800 mgd. Present-day dry-weather flow is approximately 80 mgd.

Thus the wet-weather flow can be as high as 10 times the normal flow. However, neither the provisions of the Clean Water Act nor EPA's regulations articulate a clear policy with repsect to wet-weather events except to state that overflows from separate storm sewers are not regulated. The integrated system of EBMUD is not wholly a separate system although parts of it are separate.

All of this leads to uncertainty on the part of the District, the state and EPA with considerable leeway to the EPA regional offices to make policy through enforcement and permitting decisions. EBMUD has discussed this problem with EPA Region IX and Headquarters and is making progress. But I am concerned that EPA is in the process of issuing orders which require secondary treatment for these events, an appproach which would be technologically and economically impossible, costing well over $1 billion.

EBMUD is now employing practical, remedial steps, including correction of infiltration and inflow and intends to continue to do so working with EPA and the state. Little or no water quality impact is measured during these events. I would hope that during your consideration of the Clean Water Act amendments you would address the issue of wet weather flows and avoid the requirement for secondary treatment when other solutions might be better.

Mr. Chairman, this completes my testimony. I appreciate your close attention to these matters of utmost importance to California as you consider S. 53 and S. 652.

Association of State and Interstate Water Pollution Control Administrators

TESTIMONY

Before the Senate Subcommittee on Environmental Pollution
March 27, 1985

Mr. Chairman, Members of the Subcommittee:

My name is J. Leonard Ledbetter and I am the Commissioner of the Department of Natural Resources for the State of Georgia. I am here today on behalf of the Association of State and Interstate Water Pollution Control (ASIWPCA), to represent the States' perspective on the reauthorization of the Clean Water Act (CWA).

As the Vice President of ASIWPCA I am pleased to introduce our organization's Executive Director, Ms. Roberta (Robbi) Savage. As you know Mr. Chairman, Robbi and her staff are located here in Washington and are available to discuss with you the positions of ASIWPCA, and the States' responses to the various provisions being considered by the Senate during this reauthorization.

We commend this Subcommittee and the full Committee for their interest and support in our environmental programs, particularly for your support, Mr. Chairman, of a strong Clean Water Act. Also, we appreciate the staff you have assembled to work on this reauthorization and we appreciate their arranging for this exchange of ideas on pertinent issues.

Our Association is a national, non-partisan organization of State officials, who on a daily basis implement the Clean Water Act, and for many of us, numerous other statutes as well. As professional managers of State water programs, the members of the ASIWPCA are committed to the environmental objectives set forth in the Clean Water Act.

Since our membership is concerned and involved with all aspects of the clean water program, we wish to present views and recommendations on several issues. However, in the interest of time, these will be submitted for your consideration as part of our statement and I will simply summarize our priority positions and then focus on Title II. We do ask, however, that the entire statement be made a part of the hearing record.

As documented in the ASIWPCA report, America's Clean Water, (1984), which was developed by the States with the support and encouragement of the U.S. Environmental Protection Agency (U.S. EPA), tremendous strides have been accomplished in improving the nation's waters. America's Clean Water documents progress in water pollution abatement, especially following enactment of the Clean Water Act in 1972. In order to assure continued progress, it is essential that Congress reauthorize the Clean Water Act in 1985 to maintain the momentum toward achievement of the goals and compliance with the requirements of the Act.

From our report we have learned that of the nation's 1.8 million miles of streams, 58% are generally free of known water quality pollution problems. The remaining 42% (758,000 miles) represent the geographic locations supporting America's population and/or industrial activity. And, in a decade when the nation's population grew by 11%, accompanied by a sizable increase in the use of surface waters for industry and recreation:

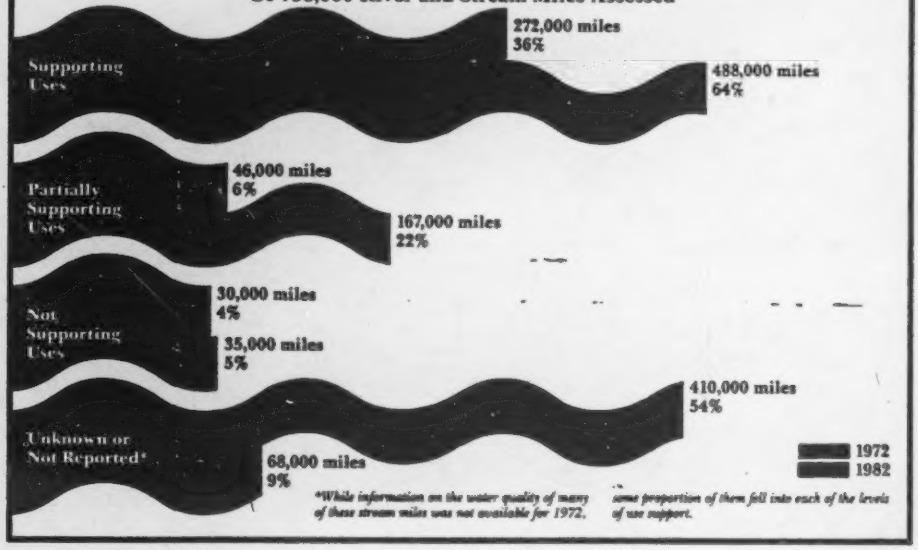
- 47,000 stream miles have improved in quality;
- 390,000 acres of lakes show improved water quality;
- 142 million people were, in 1982, receiving secondary or more advanced levels of sewage treatment -- up from 85 million in 1972; and
- cities and industries have substantially increased compliance with their limits on waste discharges.

WATER QUALITY

STREAMS AND RIVERS

Stream Water Quality 1972-1982

Of 758,000 River and Stream Miles Assessed



*While information on the water quality of many of these stream miles was not available for 1972, some proportion of them fell into each of the levels of use support.

While much has been accomplished, there are still many "miles to go before we sleep," which in and of itself is a misnomer, because the work of safeguarding our people and protecting their environment is a never ending process to which we as environmental professionals have dedicated our careers and our lives. The key areas identified below are of the highest priority to the States and need to be addressed as a part of the reauthorization:

- Section 106 - provide for **State management grants** to assist the States in administration of the program at the current authorized level of $75 million annually.
- Section 207 - provide for a minimum of $2.4 billion annually to fund **Construction Grants for Publicly Owned Treatment Works (POTWs)** and activate an effective transition from the current Federal grants to a program which authorizes the States to use the funds in innovative financing systems, including State revolving loan programs; create positive incentives and maximum flexibility for States to establish alternative programs and minimize disincentives.
- Section 208 - provide for the States to use certified **Water Quality Management Plans** to manage nonpoint source pollution with Federal financial and technical assistance.
- Section 301 - provide for the States to use **bioassays and biomonitoring** to identify toxic impacts and assure pollution sources are properly regulated to protect water quality of receiving streams, and in so doing not require specific numerical criteria to be established for toxic pollutants.
- Section 307 - enable the States to continue existing alternative local **pretreatment** programs where demonstrated to be effective.
- Section 309 - provide language to ensure that **civil penalties authority** for U.S. EPA does not result in disruption of ongoing, effective State programs and does not authorize U.S. EPA to act if the State is proceeding with an action.
- Section 402 - enable States to receive partial **National Pollutant Discharge Elimination System (NPDES)** permit delegation and provide for ten year permits.
- Section 502 - provide clarification of point sources to enable States and U.S. EPA to issue **permits for stormwater runoff** only when determined as needed to protect designated water use or when associated with permitted industrial facilities.

EXPLANATION OF HIGH PRIORITY AREAS

I. TITLE I

Section 106 - (State Management Grants)

Funding for implementation of TITLE I of the Act previously expired; therefore, Congress is urged to reauthorize funding for TITLE I, specifically maintenance of an authorization of **$75 million annually for FY 85 and future years** for Section 106 funding of State program grants.

II. TITLE II

Section 207 - (Construction Grants)

Reauthorization of construction grants for publicly owned treatment works (POTWs) is essential to assure:

- **further progress** by local governments in meeting the mandates (enforceable requirements) and water quality goals of the Clean Water Act.
- activating an **effective transition** from the current Federal grants program to a program that emphasizes alternative financing methods which promote state and local self-sufficiency for continued compliance.

Congress therefore is urged to continue a **$2.4 billion national authorization/appropriation, as a minimum**, for construction of POTWs consistent with the 1981 Amendments. Furthermore, **beginning with FY 86**, Congress is urged to afford individual States the opportunity to use some or all of their Federal construction allotments for a broad range of **innovative project financing methods**, including both taxable and nontaxable bonds and revolving loan funds.

Congress should also establish a mechanism, applicable during the latter part of the authorization period, which emphasizes implementation of such **innovative financing methods.**

Toward the end of the reauthorization period, **Congress should re-evaluate** the program and finalize the strategy for the transition, including consideration of:

- future Federal role in the program;
- continued emphasis on innovative funding methods;

- funding levels adequate to ensure the establishment of **long-term funding** programs at the State level **to address "treatment works" pursuant to Section 212** of the Clean Water Act, which will help assure continuing compliance with the goals of the Clean Water Act.

Congress should create **positive incentives** to encourage States to implement alternative financing programs on an accelerated schedule. In so doing, disincentives should be minimized. Congress is specifically urged to:

- ensure **timely release of all funds** for capitalization grants to State programs immediately upon release of appropriations to U.S. EPA.
- encourage **transition to State Revolving Funds by not requiring States to match Federal capitalization grants,** recognizing that such State match is not required for existing grant funds. The budget and economic conditions of individual States could preclude or discourage transition to a loan program if State matching funds are required, especially given the uncertainty of future localized economic conditions.
- provide for **maximum flexibility** in administration of the State Revolving Funds by requiring that initial capitalization funds be used to meet the enforceable requirements of the Clean Water Act, but subsequent funds received through repayments of principal and interest be available to address categories of needs identified in Section 216 of the Act.
- provide for **periodic audits** of the State Revolving Fund program conducted either internally or externally, as State resources allow.
- provide that **States which have moved forward** expeditiously with transition to a State Revolving Fund program **should not be penalized** for such action in the establishment of future allocation formulas for distribution of grant and loan funds to the States.

RATIONALE

In 1981, Congress amended the Federal Clean Water Act to reduce the categories and scope of projects eligible to receive Federal financial assistance under the Construction Grants Program. In addition, the basic Federal share was reduced from 75% to 55%. These amendments signaled a clear intent to minimize the Federal financial exposure while providing a continued Federal fiscal presence in the completion of "core" municipal water pollution control needs. **"Core" needs are considered those treatment plants, interceptor sewers and infiltration/inflow correction needs related to the current population.** The 1984 U.S. EPA Needs Survey fixed the cost of these needs at $40.6 billion and estimated that the potential future Federal investment should be $35.8 billion. This Federal investment addresses both **completion of on-going projects and construction of new projects** necessary to meet the goals of the Clean Water Act.

The 1981 Amendments have now run their course in terms of funding authorization. An **early and clear signal of Congressional intent** with regard to future Federal fiscal involvement in municipal wastewater facilities construction is critical to continued progress toward the water quality goals of the Clean Water Act. In his 1983 Congressional testimony, William Ruckelshaus, then Administration of the U.S. EPA, announced that the Agency would conduct a study of the appropriate future Federal role which would be used as the basis for U.S. EPA recommendations regarding program reauthorization.

The U.S. EPA study has recently been completed and recommends several items which are key to an effective Title II reauthorization: 1) several years of **stable and substantial Federal financial assistance**; 2) a **multiple year transition** period from the current grants program to a program of alternative financing; and 3) **State flexibility** in use of allotted funds during transition and in the nature of the financial assistance provided.

The above points are recognized by the Association membership as critical elements for program reauthorization. The Association position calls for a reauthorization at the current level of funding and suggests the need for a statement of Congressional intent to revisit the program and move toward completion in the 1990's. This position is consistent with the wording and intent of the position adopted in February by the National Governors' Association, which recognizes the current constraints on the Federal budget.

The funding mechanism recommended by the U.S. EPA study is Federal capitalization of State-managed revolving funds (SRF) which would be dedicated to low or no interest loans to municipalities for construction of needed water pollution control facilities. Although 100% loans would initially accomplish much less in construction volume than 55% grants, they would, upon repayment, be available to be loaned again, thus accomplishing more over a longer period. On the third and subsequent uses, the revolving funds clearly outdistance grants. The primary advantage to State program managers in developing a revolving fund is having a predictable long-term financial assistance program which would help assure continuing compliance with water quality goals. The U.S. EPA report indicates that an SRF would involve substantially reduced Federal program requirements which would streamline program implementation and administration.

At the February 19, 1985, **ASIWPCA Alternative Financing Workshop,** States shared their experiences with State Revolving Funds. From those discussions, some key considerations were apparent:

1. It is not reasonable to expect an SRF to be implemented in less than three full years, because of the State legislative and regulatory review process.
2. There will continue to be some "hardship case" communities which do not have the financial capability to construct needed facilities unless their loan is supplemented with some grant assistance.
3. The ability to advance funds for planning and design is very important, especially for smaller communities.
4. Local governments have foregone the promise of future grants for the availability of immediate loans. Therefore, in at least those instances, the SRF was a more effective water pollution control funding mechanism.

POSITION SUMMARY

The **ASIWPCA** position statement highlights the following areas of consensus:

- **reauthorization of at least $2.4 billion annually;**
- **a continuing Federal fiscal presence;**
- **immediate (FY 1986) availability of State allotments for alternative financing;**
- **no limits on new starts** (Funds must be available to both on-going and new projects).
- the need for an **evaluation near the end of the five-year authorization** period with respect to:
    - the future Federal role;
    - emphasis on innovative funding methods; and
    - funding adequate for the establishment of long-term financial assistance programs.

In addition to the above, it was also agreed that:

- there should be reduced Federal requirements associated with an alternative financing mechanism; and
- the continuation of grants after the recommended five-year reauthorization period should not be precluded from consideration.

To help address these last two points, it is suggested that the Federal legislation clarify that, although the SRF should be dedicated to water pollution control purposes, the funds should cease to have a Federal identity after their first-round use.

Section 208 - (Nonpoint Sources)

Nonpoint source pollution (NPS) is a significant portion of the total water pollution problem in the United States. The major source of nonpoint pollution includes urban, agriculture, construction, mining, and silviculture. **The degree of the problem and the priority of correcting nonpoint source water quality problems varies from State to State.** Therefore, the primary responsibility for nonpoint pollution control should remain at the State level. Most States are underway in developing and implementing programs to comply with the Clean Water Act. Since the States have water quality management plans previously certified by U.S. EPA, funding and technical assistance should be provided by the Federal government to assist in the further implementation of these programs.

Many of the nation's waters are adversely impacted by nonpoint sources. **Substantial progress has been made** in the States to develop and implement nonpoint source and groundwater programs, but much remains to be done. While States should negotiate work plans with the U.S. EPA, **no one set of deadlines or requirements can apply to all categories or sources.** Federal regulation of nonpoint sources will not increase abatement levels.

Because of the complexity of nonpoint source controls, water quality **results will not be achieved overnight.** The necessary improvements will take time to put into place and then evaluate. Constant surveillance and maintenance is needed to insure that the problem does not revert back to the original state.

The **ASIWPCA** membership recommends that:

1. States have **flexibility** to develop and implement nonpoint source programs (regulatory or voluntary) based on their priority nonpoint source water quality problems.

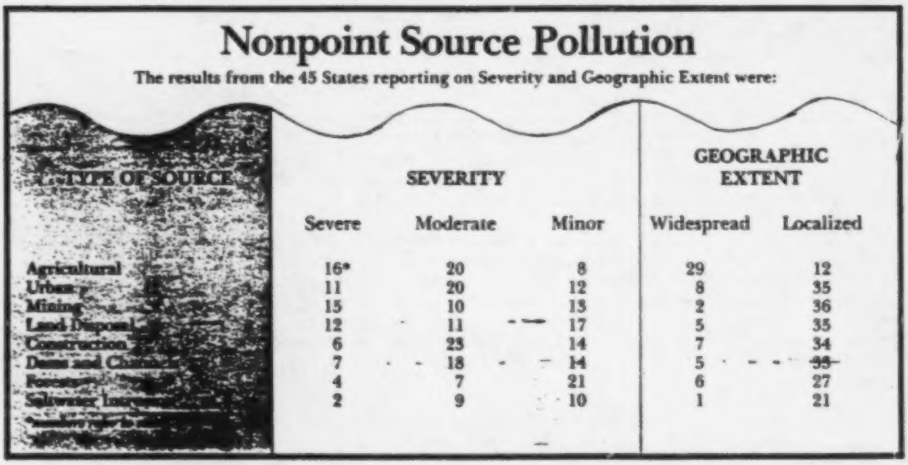
2. A **modest Federal commitment** in the range of the Senate Bill 53 and House Bill 8 ($70 million - $150 million annually for matching grants should be provided to assist States in implementing their nonpoint abatement projects.

3. **States should be held accountable** for controlling nonpoint source pollution and achieving the goals of the Act.

4. U.S. EPA should **continue research** on effective BMPs, provide technical assistance, and conduct general oversight.

5. The national **nonpoint source program should be an integral part of existing programs** under Sections 106 and 303(e).

As a part of our report, **America's Clean Water**, we asked the States to be specific in reporting on severity and geographic extent of nonpoint sources of pollution within their State:



Nonpoint Source Pollution

The results from the 45 States reporting on Severity and Geographic Extent were:

TYPE OF SOURCE	SEVERITY			GEOGRAPHIC EXTENT	
	Severe	Moderate	Minor	Widespread	Localized
Agricultural	16*	20	8	29	12
Urban	11	20	12	8	35
Mining	15	10	13	2	36
Land Disposal	12	11	17	5	35
Construction	6	23	14	7	34
Dams and Ch[illegible]	7	18	14	5	~~33~~
Forestry	4	7	21	6	27
Saltwater In[illegible]	2	9	10	1	21

[illegible]

Based on this proven track record of success in portraying State water quality data in a succinct and effective manner, U.S. EPA asked the **ASIWPCA** to enter into a cooperative agreement project to document the status of nonpoint source programs in the 50 States.

From this project, which will be completed in September of 1985, we will assess and report on:

- the priority of water quality problems caused by nonpoint sources of pollution,
- the status of nonpoint source water quality programs in the States, using valid and consistent data,
- accomplishments in nonpoint source pollution abatement in improving water quality,
- transfer of technology to the States about programs other States have found effective in evaluating impacts and improving water quality through controlling nonpoint sources of pollution, and
- recommended future directions and possible financial sources.

III. TITLE III

Section 301 - (Toxic Pollutants)

The Clean Water Act has a sound conceptual framework for addressing toxic pollutants. Future **permits or reissued permits should require toxic monitoring,** as appropriate, where toxicity is anticipated. Toxic monitoring should include the use of bioassays and biomonitoring as appropriate to supplement chemical and physical data.

State Water Quality Standards may include biological, narrative or specific numerical criteria for toxic pollutants. The Clean Water Act should not require that States develop specific numerical criteria for toxic pollutants.

Section 307 - (Pretreatment)

The national pretreatment control program should be managed to ensure adequate protection of the publicly owned treatment works and the environment. The Act should provide further implementation of future pretreatment programs and national categorical standards in those instances where alternative local programs have not already been provided and approved. If an alternative local program has already been provided and approved by the State and/or U.S. EPA, the NPDES program should be authorized to allow the local pretreatment program to continue where it is demonstrated no water quality problems exist.

Section 309 - (Civil Penalties)

The Clean Water Act **should not be amended** to require States to have civil penalties identical to any that are authorized for U.S. EPA. Such changes to the Act will result in great disruption to ongoing State programs.

When a State has proceeded with an enforcement action relating to a violation with respect to which the Administrator is authorized to assess a civil penalty, the **Administrator should not be authorized** to take any action involving a case where the State demonstrates that the State imposed penalty is appropriate.

IV. TITLE IV

Section 402 - (NPDES Permit Program)

This Section should be revised to allow partial assumption by States of the NPDES program pursuant to joint Federal/State agreements. In addition, it is essential that the Act be amended to provide for the issuance of **NPDES permits up to ten years**, provided flexibility is maintained to re-open a permit for good cause. This will result in a much more effective use of State and Federal personnel while ensuring adequate, continuing oversight by U.S. EPA.

V. TITLE V

Section 502 - (Stormwater Runoff as a Point Source)

Recent court decisions mandating NPDES permits for stormwater runoff from all parking lots, etc., will result in massive paperwork and unjustified personnel time on the part of property owners and government agencies with minimal positive environmental impact. Congress is urged to **clarify the definition of a point source** so that U.S. EPA and/or the State would be required to **issue NPDES permits only where it** is determined by the permitting agency that the stormwater runoff **would interfere with the designated use** of the receiving water body or the runoff is associated with permitted industrial facilities.

SUMMARY

The positions outlined in this testimony have been developed by the State Directors of the Clean Water Program.

Based on their professional expertise and their many years of experience in developing effective Clean Water programs, **ASIWPCA** members are convinced that the changes outlined above will serve to enhance existing law.

Congress is urged to move expeditiously to reauthorize the Clean Water Act and to institute changes that will assist the States in administering and managing effective programs. **ASIWPCA** members and staff are available at any time to work with Congress to effect such reauthorization.

We extend our appreciation to the Congress and to this Subcommittee for their diligence in the development of effective, implementable environmental legislation. **ASIWPCA** and its State members thank you for this opportunity to come before you to discuss these most important issues.

ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES
SUITE 200, 1015 18th ST., N.W., WASHINGTON, D. C. 20036 (202) 659-3161

MEMBER AGENCIES
Jefferson County Sewerage District, AL
Anchorage Water & Sewer Utilities, AK
City of Phoenix, AZ
Pima County Wastewater Management, AZ
City of Little Rock, AR
City of Pine Bluff Sewer Department, AR
Chino Basin Municipal Water District, CA
Orange County Sanitation District, CA
City of Los Angeles, CA
Central Contra Costa Sanitary District, CA
East Bay Municipal Utility District, CA
Sacramento Regional Sanitation District, CA
City of San Diego, CA
City of San Francisco, CA
City of San Jose, CA
Western Regional Sanitation District, CA
Los Angeles County Sanitation Districts, CA
City of Colorado Springs, CO
Metro Denver Sewage Disposal District, CO
The Metropolitan District (Hartford), CT
District of Columbia, DC
City of Jacksonville, FL
Miami-Dade Water & Sewer Authority, FL
Orange County Public Utilities, FL
City of Tampa, FL
City of Atlanta, GA
City of Honolulu, HI
City of Boise, ID
MSD of Greater Chicago, IL
Sanitary District of Rockford, IL
City of Wichita, KS
Louisville & Jefferson County MSD, KY
New Orleans Sewerage & Water Board, LA
City of Baltimore, MD
Anne Arundel County, MD
WSSC, Hyattsville, MD
Metropolitan District Comm., Boston, MA
Upper Blackstone WPAD, MA
South Essex Sewerage District, MA
Wayne County Public Works, MI
Detroit Water & Sewerage Department, MI
City of Kalamazoo, MI
WLSSD, Duluth, MN
Metro Waste Control Comm., St. Paul, MN
City of Kansas City, MO
St. Louis MSD, MO
City of Omaha, NE
Ocean County Utilities Authority, NJ
Essex and Union Counties, NJ
Bergen County Utilities Authority, NJ
Passaic Valley Sewerage Commissioners, NJ
Middlesex County Utilities Authority, NJ
City of Albuquerque, NM
Albany County Sewer District, NY
Buffalo Sewer Authority, NY
Nassau County D.P.W., NY
City of New York, NY
Onondaga County, NY
County of Monroe, NY
City of Greensboro, NC
Public Utilities Department, Raleigh, NC
City of Akron, OH
Greater Cincinnati MSD, OH
Cleveland Regional Sewer District, OH
City of Columbus, OH
City of Dayton, OH
City of Toledo, OH
Tulsa Water & Sewer Department, OK
Unified Sewerage Agency, OR
City of Portland, OR
City of Philadelphia, PA
Allegheny County Sanitary Authority, PA
Narragansett Bay Commission, RI
City of Chattanooga, TN
City of Knoxville, TN
City of Memphis, TN
City of Nashville, TN
Trinity River Authority, TX
City of Dallas, TX
El Paso Water Utilities, TX
City of Fort Worth, TX
Gulf Coast Waste Disposal Authority, TX
City of Houston, TX
City of San Antonio, TX
Salt Lake City Public Utilities, UT
Central Valley WRF, UT
Fairfax County Sewer System, VA
Hampton Roads Sanitation District, VA
Municipality of Metropolitan Seattle, WA
City of Tacoma, WA
Green Bay MSD, WI
Milwaukee MSD, WI

STATEMENT BY

CHARLES KAISER, JR.

ASSISTANT EXECUTIVE DIRECTOR

AND GENERAL COUNSEL

METROPOLITAN ST. LOUIS SEWER DISTRICT

ON BEHALF OF THE

ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES

AND

U.S. CONFERENCE OF MAYORS

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

ENVIRONMENT AND PUBLIC WORKS COMMITTEE

U.S. SENATE

WASHINGTON, D.C.

MARCH 27, 1985

Mr. Chairman, I am Charles B. Kaiser, Jr. I am here today representing the Association of Metropolitan Sewerage Agencies for whom I serve as Chairman of the Legislative Committee. AMSA member agencies serve more than 80 million people in 97 urban areas which collectively provide services to 50 percent of the nation's sewered population. These agencies range from the City of Las Cruces Utility Division serving 50,000 citizens to New York City's Department of Environmental Protection serving more than 8 million citizens. I also am Assistant Executive Director and General Counsel of the Metropolitan St. Louis Sewer District.

In addition, I am also very honored today to be representing the U.S. Conference of Mayors, which is composed of the nation's principal cities. AMSA and the Conference have worked jointly in recent years to ensure fair and sensible implementation of the Clean Water Act for all cities.

To AMSA and Conference members, the central issue of these hearings is the Construction Grants Program. Consequently, my testimony today will concentrate on our concerns in this area.

Mr. Chairman, our organizations have consistently supported the goals of the Clean Water Act. We continue to support them, and we have made great strides under the current program toward achieving the program's goals. And we can finish this job if the Congress will let us.

The 1988 secondary deadline is fast approaching. Budget cuts in domestic programs will make it harder for us to secure revenues and public support for clean water projects. And, the federal program to assist our efforts is again up for review within the context of limited resources. But we can do what we need to do, if you will support us.

The U.S. Conference of Mayors undertook a survey of 157 cities on the impact of the proposed budget cuts, which we are submitting for the record for your review. That survey indicates that:

- 36 percent of surveyed cities could not complete existing projects in four years if the wastewater treatment program was phased out;.
- 60 percent would be required to resort to significant tax increases or user fee increases to meet wastewater obligations -- almost half of the cities in the survey are under some mandate to finish projects or construct new ones;
- 43 percent of these cities predicted tax increases of at least 25%;
- Impacts on housing, community development, economic development, jobs and environmental quality are predicted if needs are not met;
- only four percent predict state help in this area.

We understand the difficult choices you are now considering. Recognizing these constraints, our testimony today offers some options to achieve further progress in meeting the goals of the Clean Water Act. These are our basic objectives in designing an approach to deal with current conditions:

- To preserve momentum to secure maximum environmental gains;
- To minimize unnecessary disruptions in the program;

- To secure the largest return for remaining federal dollars; and finally,
- To ensure that communities now ready to comply with deadlines have an opportunity to do so.

Any proposals which you consider we hope will be evaluated against these principles.

Equally important, existing law must be retained to continue the current grant program to fund these projects. If you shift the financing mechanism in midstream, you undercut the real circumstances governing how many of these projects were developed, including the financing structure to support them. Most urban projects have financing plans that were developed contingent upon numerous interlocal agreements between the wastewater agency and the local governments it serves. A shift in financing would result in reopening these agreements and, in many cases, court suits, thus substantially delaying the environmental benefits associated with completion of these projects.

Beyond funding for existing projects already underway, AMSA would propose two options:

1) To fund those projects which are ready to go to construction and are tied to the enforceable requirements of the Act; or
2) To specifically target funds to projects serving the greatest number of people and yielding the maximum environmental benefits.

The first option would allocate funds to each state based on needs in two major categories: total costs to complete those projects already underway;

and costs of projects which are ready for construction at the beginning of each fiscal year and integrally tied to water quality goals. Mandated costs are the total costs of facilities and systems needed to comply with the requirements of the Act regardless of categorical eligibility. Grants should be awarded on the same basis.

The allotment formula should also give special consideration to the needs of communities where a secondary waiver application has been denied. These systems have never had an opportunity to receive funding consideration and, as a result, they may soon be applying for grant assistance for the first time. This option should also include a provision which gives priority to those projects that do not receive grant commitments during the first year of special eligibility.

A second option is to target funds directly to urban areas. Under this approach, the federal government would specifically direct grants to purchase the maximum return for each dollar made available.

AMSA's 1983 needs survey showed that a $15 billion federal investment would meet the total needs of more than 80 million citizens. In one effort, we can meet the total needs of more than one third of the nation and at the same time secure maximum environmental gains.

Targeting funds to those regional systems serves more than the nation's largest cities. For example, The Metropolitan St. Louis Sewer District serves St. Louis and 90 other municipalities; Chicago MSD serves Chicago as well as

43 other cities; Seattle METRO serves the City of Seattle and 22 suburban communities within the agency's service area; and Hampton Roads Sanitation District serves Virginia's two largest cities, Norfolk and Virginia Beach, and seven other cities and three counties. The nation's largest cities as well as hundreds of smaller, suburban localities would be fully in compliance within the next seven years.

Both options I have discussed rely on continuing grants, not loans. A level of $2.4 billion annually in existing grant funding over the next four to six years would significantly fulfill the objectives of both approaches.

Let me add a further comment on the loan concept. We support the loan program for addressing future needs, those beyond reaching the enforceable requirements of the Act.

Throughout the balance of my testimony, I have addressed other issues of concern to AMSA members.

The Association supports the concept of integrated sludge management policy and regulations at EPA, to pull together the program requirements which are now scattered across statute and program office. Such an integrated program should incorporate a cross-media risk assessment methodology. AMSA has been working closely with EPA as they proceed with their program development on sludge management, initially through their special task force and now with the several program offices charged with the responsibility for development of the programmatic, technical and policy pieces of the final package. We remain optimistic that our continued cooperation with EPA will result in comprehensive and workable documents for all sewerage agencies.

AMSA is concerned about the proposed changes in 301(h). The AMSA coastal and estuarine agencies that have applied for modified NPDES permits under this subsection recognize the fundamental requirement that the burden is theirs to demonstrate that in their particular facility the criteria of the subsection are met and that adequate and reasonable monitoring would occur upon issuance of a modified permit. To come along several years after the initiation of this program and impose additional requirements is equivalent to changing the rules when the game is nearly over.

AMSA believes that backsliding should not be permitted under most circumstances. Permitting authorities should continue to set effluent limitations based on available information. However, backsliding should be permitted in those cases where subsequent information and study demonstrates that the initial standards were inappropriate.

We also appreciate the Committee's interest in controlling non-point sources of pollution. We support funding of non-point source projects provided that funding as a general rule is separate and apart from Title II construction grants funding. We do support the use of Title II set-aside funds for non-point abatement program that eliminate the need for more costly facilities now eligible for funding under Title II.

In dealing with this very important issue, we caution the Committee to keep in mind the point source pollution problems that remain to be addressed and to reconsider the Congressional action in 1981 which made combined sewer overflow projects ineligible for federal funding. Our experience to date with the 1981 changes on eligibility for CSO correction demonstrates that the resources are not being made available to those projects which are cost effective and critical to local efforts to meet water quality objectives. We recommend that CSO projects necessary for compliance with the enforceable requirements of the Act should be made eligible if the applicant can show that a project is essential to meet water quality goals and to comply with the enforceable requirements of the Act. We believe that this recommendation can be incorporated into legislation that effectively precludes funding for many CSO projects which do meet the tests as noted above.

In a related area, we call the attention of the Committee to the Marine CSO Program. There are now more than $120 million in applications pending for this program which is now funded at $30 million. We believe EPA can demonstrate to the Committee the value of these projects and the significant environmental gains that are possible through funding cost effective CSO projects.

We urge the Committee to review current EPA audit efforts affecting the construction grants program. At AMSA's request, the EPA Office of the Inspector General formed a Study Group on Audit Issues to provide a forum for resolving problems with the audits as raised by a number of AMSA members. A survey of AMSA members on audit problems found that the leading problem is auditor reversals of prior program official approvals. Different interpretations of regulations follows as the second ranking problem. The timeliness of audits was also cited as a major problem, with many audits occurring more than five years after project completion. While we hope that through this study group we will be able to resolve these problems, we fear that budget cuts and staff reductions will preclude any serious consideration of the proposals we have offered EPA to remedy problems in this area. The lack of staff and the substantial backlog of pending cases guarantees that these retrospective reviews will span even more years, making resolution of the issues nearly impossible.

We also support efforts to retain the current five-year National Pollutant Discharge Elimination System permits. We believe the present five-year system can be made to work more effectively through a greater state commitment of resources and staff to this effort.

Finally, I would like to raise the issue of the Pretreatment Program. In the past, we have raised this issue and recommended various legislative approaches to deal with our concerns. At the same time, our members were working with EPA through the Pretreatment Implementation Review Task Force (PIRT) to develop recommendations for improving the program. We support the preliminary recommendations and believe that if EPA aggressively pursues these important program changes and commits sufficient staff and resources to program implementation, that Congressional action on a local pretreatment program is unnecessary at this time.

This concludes my prepared remarks. I would be pleased to answer any questions you might have at this time.

National
League
of
Cities

1301 Pennsylvania Avenue NW
Washington, D.C.
20004
(202) 626-3000
Cable: NLCITIES

Officers

President
George V. Voinovich
Mayor, Cleveland, Ohio

First Vice President
Carol Bellamy
Council President, New York, New York

Second Vice President
Henry G. Cisneros
Mayor, San Antonio, Texas

Immediate Past President
George Latimer
Mayor, St. Paul, Minnesota

Executive Director
Alan Beals

STATEMENT OF

MR. TED LEHNE

COUNCIL MEMBER, FAIRBANKS, ALASKA

on behalf of

THE NATIONAL LEAGUE OF CITIES

on

THE WASTEWATER CONSTRUCTION GRANTS PROGRAM

before the

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

March 27, 1985

Past Presidents: **Tom Bradley,** Mayor, Los Angeles, California • **Ferd L. Harrison,** Mayor, Scotland Neck, North Carolina • **William H. Hudnut, III,** Mayor, Indianapolis, Indiana • **Henry W. Maier,** Mayor, Milwaukee, Wisconsin • **Jessie M. Rattley,** Councilwoman, Newport News, Virginia • **John P. Rousakis,** Mayor, Savannah, Georgia • **Charles Royer,** Mayor, Seattle, Washington • **Directors:** **Art Ashley,** Mayor, Nitro, West Virginia • **Ross Bosserman,** Council Member, Vancouver, Washington • **Robert R. Cantine,** Executive Director, Wyoming Association of Municipalities • **Henry Cook,** Council Member, Jacksonville, Florida • **Joe W. Davis,** Mayor, Huntsville, Alabama • **James E. Ferguson,** Mayor, Provo, Utah • **Donald Fraser,** Mayor, Minneapolis, Minnesota • **Terry Goddard,** Mayor, Phoenix, Arizona • **Ron Gonzales,** Council Member, Sunnyvale, California • **George D. Goodman,** Executive Director, Michigan Municipal League • **Daniel E. Griset,** Mayor, Santa Ana, California • **Richard Guthman, Jr.,** Council Member, Atlanta, Georgia • **Robert W. Harpster,** Executive Director, League of Iowa Municipalities • **Delores Hudson,** Council Member, Warrensburg, Missouri • **Brendan J. Kennedy,** Alderman, New Britain, Connecticut • **Dud Lastrapes,** Mayor, Lafayette, Louisiana • **Paul A. Lenz,** Mayor, Alton, Illinois • **Gerald McCann,** Mayor, Jersey City, New Jersey • **Brian J. O'Neill,** Council Member, Philadelphia, Pennsylvania • **Pamela P. Plumb,** Councilor, Portland, Maine • **Ruth H. Scott,** Council Member, Rochester, New York • **James W. Segel,** Executive Director, Massachusetts Municipal Association • **Lottie Shackelford,** City Director, Little Rock, Arkansas • **Raymond C. Sittig,** Executive Director, Florida League of Cities • **Donald A. Slater,** Executive Director, League of Minnesota Cities • **Consuelo S. Thompson,** Mayor, Española, New Mexico • **Minette C. Trosch,** Mayor Pro Tem, Charlotte, North Carolina • **Donald Tucker,** Council Member, Newark, New Jersey • **Thomas X. White,** Council Member, Greenbelt, Maryland • **Louis Zapata,** Council Member, Fort Worth, Texas

Mr. Chairman, members of the Committee; I am Ted Lehne, a member of the City Council from Fairbanks, Alaska and a member of the National League of Cities' Energy, Environment and Natural Resources Steering Committee. I am here today to testify about the wastewater treatment plant construction grants program on behalf of NLC and the 15,000 cities we represent--cities ranging in size from New York City to Scotland Neck, North Carolina.

First, Mr. Chairman, we are not here as local governments asking for federal assistance to solve a local problem. Rather we are local governments offering to help the federal government solve a national problem.

The nation's waters do not respect political boundaries. They flow from city to city and state to state. The actions of any one city or any one state may adversely impact Americans living in many cities and in many states.

Clean water is recognized as a national priority, one on which all of us--cities, states, and the federal government--should be willing to work. The National League of Cities believes the federal government has an obligation to continue its financial participation in the successful construction grants program and to reject efforts to phase-out such assistance until we have achieved our goal. Clean water for all Americans has been and should remain a national committment.

We support the objectives of the Clean Water Act and the evidence clearly indicates we are making progress toward achieving its goals. Those goals are being achieved because the law approaches the problem from the perspective of prevention and prevention is far less expensive in the long run than attempting to reverse significant damage after it has occured. If we do not continue our efforts at prevention, we will ultimately need another Superfund-type of clean up activity, a far more costly endeavor as this committee well knows.

We also want to warn of the dangers of averages. It is true that we have made real progress in cleaning up our waters. The EPA reports that 70 percent of the secondary plants required by the Clean Water Act have been constructed, but in many of the rivers that receive sewage from the 30 percent of communities that have not built required secondary treatment plants, pollution is as bad as ever.

This issue is of broad concern to cities from the largest to the smallest. The problems of achieving compliance vary depending on city size.

For the nation's large cities--the New Yorks, the Bostons--the costs are immense and the technology complex. Facilities costing in the billions of dollars, requiring complicated technology and broad interjurisdictional agreements are understandably slow getting authorized. Some are just now crossing the last hurdles, at a time when there is talk of ending the program.

The medium-size cities have different obstacles to comply with the law's requirements. A condition of receiving a federal grant for many of these cities is that the facility serve many of the surrounding communities as well, an approach we consider appropriate. But regionalizing a wastewater treatment plant means negotiating rate setting agreements and allocating financial responsibility for the local share of costs among the many participating jurisdictions.

For the smaller cities, especially those that are remote from the more populous areas of a state, the problems with constructing a wastewater treatment plant are almost insurmountable. Essentially, the nation's smallest cities have very limited access to the bond market and regardless of the local match requirements are often unable to finance the costs of construction. While the cost of a plant for a small city is not large, the cost per capita is often very high. As a result, frequently they place relatively low on a state's priority list.

The smaller facility also loses economies of scale resulting in a high cost per 1,000 gallons of water treated. That means high user changes that discourage voters from approving the bonds necessary to build plants that must be built to comply with the law. The population residing in the small rural areas and the inner cities are also frequently the people least able to pay such high user charges, if the plants are built.

All cities, regardless of size, are part of their states' priority setting process. States can establish priorities for funding treatment plants on a variety of criteria, such as serving the greatest number of people or having the greatest impact on the environment. These objectives are not necessarily coterminous. In a large city such as Boston, the cost of constructing a wastewater treatment facility to deal with its problems is estimated to be at least $2 billion. Yet the state of Massachusetts receives about $83 million annually of 201 money. For some in Massachusetts, the Boston facility seems an impossible candidate for the state's priority list, even though it would serve a significant percentage of the state's population. In contrast, in my state of Alaska, Pelican, a city of 600 people, requires a facility costing $1.3 million. Given a 55 percent federal grant, that city of 600 will be required to come up with $600,000 or $1,000 per person just for the costs of construction.

What would be the consequences of federal withdrawal from financial participation in the construction grants program? We fear that many needed plants would not be built.

The surpluses that Treasury maintains exist at the state and local level are simply not there. At the state level, 16 governors have indicated their intention to raise state taxes this year. My own state of Alaska faces a $300-500 million deficit for the fiscal year ending this June 30. Even if a state should have a surplus, we are told it will be used to compensate for reductions in support of operating programs.

Local governments are prohibited by state law from deficit spending. Over the past four years, almost every local government has raised taxes or reduced services in order to maintain a balanced budget. Some have done both. Since we are required to balance our budgets, any prudent manager of local government is going to have a contingency fund as insurance against unexpected emergencies. At the end of the fiscal year, if no emergency has occured, the contingency fund shows up as a surplus. But then it is absorbed as revenue for the next year's budget.

For fiscal 1986, the Senate Budget Committee has proposed to reduce general revenue sharing by 50 percent, public transportation assistance by 25 percent, Community Development Block Grants by 20 percent, and housing assistance by 10 percent. This is after cities have already taken cuts of over 50 percent in urban programs over the last five years. In addition, last year's tax law and this year's Treasury proposal to eliminate the authority for cities to issue tax-exempt bonds for so-called "private purposes," is making it difficult to raise construction funds.

Cities simply do not have the fiscal capacity to absorb all the proposed cuts and simultaneously find the resources to meet such federal mandates as clean water, regardless of how much we support the objectives of those mandates. We too will have to re-prioritize and many things will not get done. If we are unable to pay for expensive plants to clean up our waters, the federal government will be forced to spend its scarce dollars on lawsuits to enforce compliance with mandates that cities have no capacity to meet. What a terrible waste of time and money!

Here is the position developed by our membership.

First, NLC supports a continuing federal financial participation in the wastewater treatment plant construction program. At a minimum, the commitment to provide an annual $2.4 billion grants program through 1990 should be honored.

Second, while we support a grants program we believe states should have the flexibility to determine how much of their allocation to use as grants or to fund a revolving loan program. This flexibiliy is essential to be able to respond to the varying needs of cities of different sizes. If the intent of Congress is to encourage states to move in the direction of a revolving loan fund, we suggest the committee consider requiring a state match as part of the grants program, but not the loan program.

Third, targeting of funds should be left to the states. We believe any attempt by the federal government to target funds has the potential to reduce state funding commitments should federal priorities differ from those of the state government.

Also, the geography and circumstances in different places dictate different approaches. One local official told us that in his state it made more sense to target a plant at the head of a river, because pollution at the headwaters would affect everyone down stream. We believe the current approach of state prioritization is working and should not be changed.

Fourth, while the issue is not within the jurisdiction of this committee, Congress should reject efforts by Treasury to reduce further local ability to raise funds in the bond market for construction of wastewater treatment plants.

Thank you, Mr. Chairman, for the opportunity to present our views. I would be pleased to answer any questions.

National
League
of
Cities

1301 Pennsylvania Avenue NW
Washington, D.C.
20004
(202) 626-3000
Cable: NLCITIES

Officers

President
George V Voinovich
Mayor, Cleveland, Ohio

First Vice President
Carol Bellamy
Council President, New York, New York

Second Vice President
Henry G. Cisneros
Mayor, San Antonio, Texas

Immediate Past President
George Latimer
Mayor, St. Paul, Minnesota

Executive Director
Alan Beals

March 4, 1985

The Honorable Robert T. Stafford
Chairman
Committee on Environment and Public Works
United States Senate
SD-410 Dirksen Senate Office Building
Washington, DC 20510

Dear Mr. Chairman:

I am writing on behalf of our 15,000 direct and indirect member cities to request that in reviewing alternatives to finance the nation's infrastructure needs - especially the municipal wastewater construction grants program - such review carefully consider federal tax changes proposed by the U.S. Treasury.

Last year, at a time when Senate Budget Committee Chairman Pete Domenici and key, bipartisan members of your Committee devoted substantial efforts - with our support - to help rebuild the nation's cities' infrastructure, the Congress enacted legislation which is projected to significantly increase the cost of state and local infrastructure by $9 to $12 billion. The legislation, the Deficit Reduction Act of 1984, created a double standard which discriminated against investments in public, capital infrastructure. The new tax law does not similarly restrict private sector capital investment.

This year, the administration has proposed severe reductions in federal infrastructure assistance, even as federal court orders have required increased infrastructure investments by cities and states. Your agency has recently determined that the nation will need to spend $109 billion over the next 14 years to meet just the federally mandated clean water needs. Yet, concurrently, the U.S. Treasury has proposed still further, enormous changes in the federal tax code - changes

Past Presidents: Tom Bradley, Mayor, Los Angeles, California • **Ferd L. Harrison,** Mayor, Scotland Neck, North Carolina • **William H. Hudnut, III,** Mayor, Indianapolis, Indiana • **Henry W. Maier,** Mayor, Milwaukee, Wisconsin • **Jessie M. Rattley,** Councilwoman, Newport News, Virginia • **John P. Rousakis,** Mayor, Savannah, Georgia • **Charles Royer,** Mayor, Seattle, Washington • **Directors: Art Ashley,** Mayor, Nitro, West Virginia • **Ross Boccarman,** Council Member, Vancouver, Washington • **Robert R. Cantine,** Executive Director, Wyoming Association of Municipalities • **Henry Cook,** Council Member, Jacksonville, Florida • **Joe W. Davis,** Mayor, Huntsville, Alabama • **James E. Ferguson,** Mayor, Provo, Utah • **Donald Fraser,** Mayor, Minneapolis, Minnesota • **Terry Goddard,** Mayor, Phoenix, Arizona • **Ron Gonzales,** Council Member, Sunnyvale, California • **George D. Goodman,** Executive Director, Michigan Municipal League • **Daniel E. Griset,** Mayor, Santa Ana, California • **Richard Guthman, Jr.,** Council Member, Atlanta, Georgia • **Robert W. Harpster,** Executive Director, League of Iowa Municipalities • **Delores Hudson,** Council Member, Warrensburg, Missouri • **Brendan J. Kennedy,** Alderman, New Britain, Connecticut • **Dud Lastrapes,** Mayor, Lafayette, Louisiana • **Paul A. Lenz,** Mayor, Alton, Illinois • **Gerald McCann,** Mayor, Jersey City, New Jersey • **Brian J. O'Neill,** Council Member, Philadelphia, Pennsylvania • **Pamela P. Plumb,** Councilor, Portland, Maine • **Ruth H. Scott,** Council Member, Rochester, New York • **James W. Segel,** Executive Director, Massachusetts Municipal Association • **Lottie Shackelford,** City Director, Little Rock, Arkansas • **Raymond C. Sittig,** Executive Director, Florida League of Cities • **Donald A. Slater,** Executive Director, League of Minnesota Cities • **Consuelo S. Thompson,** Mayor, Española, New Mexico • **Minette C. Trosch,** Mayor Pro Tem, Charlotte, North Carolina • **Donald Tucker,** Council Member, Newark, New Jersey • **Thomas X. White,** Council Member, Greenbelt, Maryland • **Louis Zapata,** Council Member, Fort Worth, Texas

which will, in their present form, significantly impact the ability of municipalities to finance this $109 billion capital investment.

Who is going to finance the EPA estimated costs? How? What coordination has occured between OMB, the Treasury, and the EPA on these questions?

The most common method for cities to meet their current match requirements for 201 facilities is through the issuance of municipal general obligation or revenue bonds. Cities, however, face obstacles in assuming significantly greater capital funding responsibilities - especially if federal tax laws are changed in a manner which would, once altered, substantially increase costs to cities.

The U.S. Treasury proposes to eliminate the authority of cities to issue tax-exempt bonds for so-called "private purposes." Yet, in conversations with Treasury, staff have admitted that many bonds issued for the construction of municipally owned and operated wastewater facilities would be determined "private purpose" taxable bonds - even those bonds backed by the full faith and credit of the issuing city. Consequently, this would increase municipal costs significantly.

For example, if the local capital match for a city's municipal wastewater project were $25 million, the loss of tax exemption would increase such a city's financing costs for the project by over $12 million dollars on a typical 20 year bond issue. The annual cost increase to such a city would be over $600,000. The discrepancy in costs due to tax changes would clearly reduce a municipality's ability to meet its share of capital financing costs, much less assume full responsiblity.

There are, moreover, other questions. Almost all states and local governments are under restrictions, many constitutional, which limit the amount of government-backed debt which may be issued to finance infrastructure facilities. If the 201 program is eliminated or phased out, would states and local governments even have the authority to issue sufficient debt to reach the federal requirements?

Perhaps, even more crucially, the proposed budget changes in other programs could have a profound effect on those cities already least well equipped to comply with federal clean water standards. For example, the budget proposes to eliminate General Revenue Sharing. If revenue sharing is eliminated, those cities in the most difficult fiscal conditions would be the most adversely impacted. Consequently, those cities would anticipate significantly decreased bond ratings and, conversely, significantly increased costs for issuing bonds. Simply put, the combination of budget cuts and tax changes would mean that cities in deteriorating fiscal conditions simply will not be able to comply with federal clean water requirements.

We raise these questions out of concern that federal tax policy has a direct bearing on the future of the municipal wastwater construction grants programs and to urge that these issues be fully discussed and understood prior to any Congressonal action. We would be pleased to assist in that process in any way you think we can and would be grateful for your consideration of our concerns.

Sincerely,

Alan Beals
Executive Director

STATEMENT

BEFORE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

U.S. SENATE

PRESENTED BY

JERRY D. SMITH
MANAGER
MONTECITO SANITARY DISTRICT

AND

PRESIDENT
OF
CALIFORNIA ASSOCIATION OF SANITATION AGENCIES

MARCH 27, 1985

INTRODUCTION

Good morning, Mr. Chairman and members of the Subcommittee. I am Jerry Smith and appear before you as President of the California Association of Sanitation Agencies (CASA). I am also manager of the Montecito Sanitary District. This year CASA made a decision to become an active participant in the federal process after years of devoting its attention to the state level. This decision was made because each federal action has a direct consequence for the daily operation of CASA agencies. It is for this reason that I appear before you today and offer CASA's views on the various proposals to amend the Clean Water Act.

On behalf of CASA, I welcome the opportunity to present our views on the need to reauthorize the Clean Water Act, and on the provisions of S. 53, the Clean Water Act Amendments of 1985 and S. 652, the Construction Grants Transition Act of 1985.

CASA was founded in the late 1950's by a number of sanitation districts in Northern California. Since this beginning, CASA has grown and currently represents 83 sanitation agencies throughout the State of California. CASA agencies service more than 12 million people, as well as industrial and commercial facilities.

I understand that today's hearing is only the beginning of the process to reauthorize the Clean Water Act. At the outset, CASA would like to say it is eager to work with this Subcommittee and looks forward to this opportunity.

In the interest of time, I will summarize my testimony. However, Mr. Chairman, I would like to submit, for the record, the complete text of my remarks.

This Subcommittee has before it two pieces of legislation, S. 53 and S. 652. These proposals if enacted, would dramatically alter the manner in which wastewater treatment facility needs are met as well as the roles of federal, state and local water pollution control officials. As an organization that services a state, representing over 10% of the country's population, CASA believes it is particularly qualified to comment on these proposals to amend the Clean Water Act.

Each of these bills address important elements of the Clean Water Act, but I would like to focus attention on some of the critical clean water issues for CASA in the short time I have today. CASA believes that five issues are critical to future clean water efforts:

- funding construction of wastewater treatment facilities;
- auditing construction grants projects;
- protection of the Nation's bays and estuaries; and
- sewage sludge regulations.
- liability

I would like to turn your attention to these five issues and briefly discuss our concerns.

FUNDING WASTEWATER TREATMENT FACILITIES

This Subcommittee is to be commended for its continuing efforts to assure success toward the goal of cleaning up all of the Nation's waters. We have come to a crossroads with regard to financing wastewater treatment facilities. To date, much has been accomplished through the construction of wastewater treatment facilities, but it is clear that we must decide on how this country is to proceed over the next decade and beyond the year 2000 to continue progress in water pollution control.

In 1981, Congress significantly reduced the authorization level for funding construction grants from $5 billion to $2.4 billion per year and limited the eligible uses of construction grants funding. Congress also reduced the federal share of project costs from 75% to 55%.

At the same time, Congress recognized the need to bring stability to the program to avoid creating inefficiencies in planning and constructing wastewater treatment facilities. Congress, at that time, made a commitment to provide funding for the construction grants program through the end of the decade. As a first step to that commitment, Congress authorized $2.4 billion per year through fiscal year 85.

CASA urges Congress to continue this commitment and reauthorize the construction grants program at a minimum level of $2.4 billion per year through at least fiscal year 1990

Since 1972, California's wastewater agencies have spent over $4 billion in federal, state and local funds to construct treatment facilities. These expenditures have resulted in quantifiable improvements in the state's lakes and rivers as well as coastal waters. However, the recently released EPA Needs Survey indicates that more than $4 billion of construction needs still exist under the current program. Under the current allocation formula, even the continuation of the current program through 1990 will not meet California's needs.

Many of these remaining needs are for small communities. They have spent the past several years in the facility planning stages and will soon be ready to design and construct their treatment facilities. These smaller communities did not have the resources to mobilize this construction activity when the program was in its early stages and thus much of the grant funding went to larger agencies who were prepared to proceed to construction. CASA believes that it would be most unfair to eliminate or modify the existing construction grants program in the near-term, which would create gross inequities for smaller communities trying to comply with the goals of the Clean Water Act.

In another sense, we believe that any change in the distribution of construction grants to municipalities should be avoided. Any change at this point in the program's activity may serve the purposes of delaying actual construction progress of wastewater treatment facilities and create unnecessary inefficiencies in program administration. When Congress passed the 1981 clean water amendments, it took the EPA almost two years to publish the necessary regulations implementing these amendments. Given this track record, CASA urges the Subcommittee to avoid major changes in this program to ensure that we do not experience a recurrence of regulatory delays which may slow progress toward completion of wastewater treatment facilities.

If Congress intends to phase out or eliminate the grant program before all of the water pollution control needs of our Nation are addressed, then we recommend that Congress begin the transition by committing to a lead time that does not impinge upon these communities' plans that were based on construction grants funding through 1990. Based on this concern CASA urges support for any alternative wastewater financing scheme that would not diminish the availability of construction grants until fiscal year 1991.

Specifically, CASA recommends that Congress appropriate funds, beginning in fiscal year 1986, to capitalize a loan fund that would parallel the grant program, instead of reducing the available level of construction grants. If some states found themselves prepared to expedite the transition into a loan program, without disrupting plans based upon construction grants funding, then the ability to move construction grants funds into the loan fund would be authorized.

CASA recognizes that future treatment needs may outstrip the available pool of resources under the existing grant program, especially in light of the mounting federal debt. While endorsing the concept of a loan program, CASA is concerned that any loan program be implemented in a manner far less cumbersome than the administrative burden imposed by the construction grants program over the past thirteen years. Any loan program's success depends upon the ability to finance a project at the lowest cost. Administrative guidelines are a necessary element of any program to ensure that it is successful. However, if these guidelines become overly burdensome, the prospects of successfully negotiating a financially sound loan package may become extremely difficult. Administrative burdens similar to those imposed by the existing construction grants program, should be avoided.

CASA data indicate that administrative costs associated with satisfying the regulatory aspects of the grants program can amount to as much as 25% percent of a project's cost. If this same burden were imposed on a loan program, the ability to leverage resources through the fund may be diminished, making it increasingly more expensive for the municipality to finance the treatment facility.

The uses of the state revolving fund are equally important to the long-term success of such a program. CASA strongly supports the language of S. 652 which provides that all funds are to be used for wastewater treatment needs. This kind of language offers a clear signal that there will be a source of definite funding reserved for POTWs. While this commitment is important, CASA urges Congress to avoid any attempts to define eligible activities for state loan funds. We believe that the states and municipalities should have the maximum latitude to determine how fund dollars should be used most efficiently.

S. 652 also provides that any loans must be at terms not to exceed 20 years or the design life of the facility, whichever is less. We would suggest two changes. First, for purposes of this provision, the design life of a facility should be defined according to an engineer's certification of the specific project. This would ensure that the life of the facility is determined by taking into account any special circumstances of the facility construction or use. Second, the term of the loan should be authorized to be the greater of these two criteria. The local government financing situation is presently very tight and it is important that any new finance burdens be imposed in such a way as to facilitate the assumption of new financing responsibilities. We believe this kind of latitude represent a way to accomplish this.

In addition to these concerns, CASA believes that the complexity and component nature of a wastewater treatment facility requires a specific definition of "facility" for purposes of the loan program. CASA would be willing to work with the Subcommittee and offer recommendations on this issue.

AUDITING CONSTRUCTION GRANTS PROJECTS

Over the past several years, CASA members have been subjected to extensive EPA audit reviews of their projects to assure that federal funds were spent as originally intended and to ensure there has been no waste, fraud or corruption. CASA believes audits are necessary to protect the integrity of the construction grants program. The audit reviews we have been subjected to have gone well beyond this worthy objective and have included auditors' "second guessing" eligibility, reasonableness or necessity of project costs which previously had received EPA or State approval during the planning, design and construction of the project.

This audit review "second guessing" became a serious problem in California as early as 1980, and we expect it to spread throughout the Nation as the backlog of projects begin to receive their final audits.

CASA believes that the current audit review and the resulting audit appeals process is non-productive and unnecessarily costly to all concerned. In California, the current situation is generating an attitude that existing audit procedures are unreasonable and that a POTW's only recourse is to commit significant public resources to the appeals process.

This growing sentiment must not be interpreted to mean that audits are unnecessary. CASA firmly and unequivocally supports the audit effort to uncover waste, fraud and corruption. But we believe it is equally important that any such audit review serve the specific purpose of uncovering waste, fraud and corruption, not question the wisdom of prior EPA or state approvals, which POTWs used to justify the spending of millions of dollars.

CASA believes that an audit review program should satisfy two criteria. First, it must provide for adequate control of the actual grent program. Second, an audit review program should be fair, reasonable and consistent with the regulations in effect at the time of a grant award.

Audit reviews of California POTWs have been anything but fair, reasonable and consistent. Let me provide you with a few of the many typical examples.

1. Applying Current Regulations Retroactively to Previously Awarded Grants: As a result of an audit, auditors recommended disallowance of $172,000 in engineering costs on a grant which was awarded in 1971. The basis of this decision was a March 1, 1976 regulation.

2. Disregarding Statutory Provisions of the Clean Water Act: As a result of an audit, EPA disallowed the cost of a grit tank because the auditors viewed this as an unnecessary cost, despite the fact that EPA approved the facilities' plan showing the grit tank, and despite the fact that EPA's own Process Design Manual indicated that a grit tank was necessary ahead of the treatment process employed by the grantee in question. In disallowing the grit tank expenditure,

EPA disregarded Section 203(a) of the Clean Water Act, which states that EPA approval of plans and specifications "...shall be deeemed a contractual obligation of the United States for payment of its proportional contribution to such project."

3. Disregarding EPA Regulations Relating to Contractual Obligation EPA Assumes When Awarding a Grant: As a result of an EPA audit, EPA only allowed a maximum cost of $6,000 for preparation of an operation and maintenance manual, despite the fact that the grant which EPA awarded provided a maximum of $16,000 for the manual. The grantee spent $13,000 in preparing the manual. There was no fraud or abuse in this expenditure. Despite this fact, the decision was made in direct conflict with EPA's own regulations (section 30.345-5) that state that award of a grant by EPA "...shall constitute an obligation of (f)ederal funds in the amount and for the purposes stated in the grant agreement...."

It is our belief that matters will only continue to deteriorate, leading to more audit appeals, and more waste at taxpayers' expense unless this kind of "second guessing" as to the eligibility, reasonableness or necessity of project costs is corrected.

In recent years, we have witnessed a consistently high level of California POTWs appealing final audit determinations. The 1984 percentage has been approximately 35%. Because of this level of activity, California now has almost as many state and EPA staff resolving audit appeals as there are auditors conducting audits. In most cases, these appeals have been resolved to the satisfaction of the POTW, however; this fails to reveal totally the true situation. The true situation can best be seen by a survey of ten recently resolved audit appeals.

This survey indicated that the average audit report recommended disallowance of 17% of the total project costs. If POTWs had not contested the audit reports recommendations, their share of project costs would have increased from 12.5% to 29%, a 145% increase in local costs. Obviously, POTWs did object and as a result the disallowed percentage decreased to approximately 8.5% of project costs when the EPA Regional Office issued its final audit determination. This level was still unacceptable to the POTWs and so they formally appealed the determination. After completion of the appeal, the average final disallowal was 2% of project costs (reduced from the original 17%). As part of my testimony, I have included Table I which illustrates this circumstance in greater detail.

Of course, the reduction in disallowed costs, after the appeal process, is only one aspect of an audit process out of control. There is the issue of an audit's costs and benefits to the public. Audit appeals are resolved only after considerable resources have been expended at all government levels. Table II illustrates three examples of the audit process where the net costs exceeded any benefits. The audit process as currently conducted is not cost effective.

Most of the California audit decisions have eventually been overturned and the auditors' disallowance recommendation reduced to a negligible amount in favor of the POTW. CASA believes that this situation should be viewed as a warning light--audits, as currently performed, are focusing on the wrong issues and demanding corrective measures.

The resolution of this problem could be accomplished administratively within EPA. Unfortunately, efforts to correct deficiencies in the audit process have not yielded results and we believe a legislative remedy is necessary before a problem which has been primarily limited to Region IX becomes a nationwide problem.

CASA believes the language of section 203(a) of the Clean Water Act is quite clear in its intent: "...his (Administrator) approval of plans, specifications and estimates shall be deemed a contractual obligation of the United States for the payment of its proportional contribution to such project." This clear language has consistently been overlooked in the audit decisionmaking process and has singularly led to "second guessing" on the reasonableness, eligibility or necessity of certain uses of construction grants several years after completion of a project. Since EPA has refused to correct the problem of auditor "second guessing," CASA urges Congress to amend the Clean Water Act with the following language:

> Before taking final actions on such plans, specifications and estimates, the Administrator shall enter into a written agreement with the applicant which establishes and specifies which items of the proposed project are eligible for federal funding under this title. In the agreement, the Administrator shall certify that he has made a detailed examination of the proposed project and the proposed project costs and has determined those identified as eligible to be reasonable, necessary and allowable under applicable federal statutes and regulations, and under applicable federal cost principles. The Administrator may not later modify such eligibility determinations unless he reaches a finding that they are in violation of applicable federal statutes. Such eligibility determinations shall not preclude the Administrator from auditing a project pursuant to Section 501(c) of this Act, or other authority, or from withholding or recovering federal funds where claimed costs have not been expended in accordance with the grant agreement or where the Administrator determines there has been waste, fraud or corruption.

CASA would be pleased to work with the Subcommittee on this issue and I have attached as an appendix to my testimony a recent presentation on the problems of current audit procedures.

NATIONAL ESTUARY PROGRAM

This Subcommittee is to be commended for its attention to the needs of the Nation's estuaries and bays. CASA strongly supports S. 652's National Estuary Program as a much needed response to the threats posed to an important part of the country's ecosystem.

CASA suggests, however, that the Subcommittee revise the National Estuary Program to authorize the Administrator to consider the potential problems associated with estuaries/bays that do not require supplementing interstate or international controls. I am specifically concerned that any National Estuary Program also address those great estuaries that exist within a single state.

One example of such an estuary that would be excluded, under the current language, from any management conference is the San Francisco Bay-Delta. California already has put in place the structure to address many of the goals of an estuary program with the establishment of the San Francisco Bay-Delta Aquatic Habitat Institute. The Institute's program goals include:

- determining the health of aquatic organisms;
- identifying specific causes of adverse pollutant related changes in the San Francisco Bay-Delta's health; and
- coordinating with other monitoring and research activities in the San Francisco Bay-Delta to maximize the use of resources.

The San Francisco Bay-Delta is one of the Nation's most important estuaries. It is recognized as California's most valuable body of water, supplying water for over 15 million people and for a large portion of one of the most productive agricultural areas of the country. The Bay is surrounded by 5 million people and is a center for commercial shipping, fishing, and recreational uses.

Daily, the public expresses concern in various forms over the health and well-being of the Bay. Knowledge of the impacts of toxics and other pollutants on Bay quality is vitally important as the issues of urban and agricultural drainage, future water supplies and pollutant discharges are resolved. The Institute's efforts will enhance this data base.

With proper funding, the Institute would be able to conduct aquatic studies and coordinate monitoring activities. We believe that any National Estuary Program should include this kind of Institute as an important source of knowledge in the debate.

SEWAGE SLUDGE REGULATIONS

Section 115 of S. 53 establishes a timetable for the Administrator to develop numerical limitations and management practices for the control of toxic pollutants in sludge. CASA affirms this effort as a necessary step in providing wastewater treatment agencies with the guidance required to complete local sludge management programs.

We do have one concern related to section 115(a)(B)(III) which allows the Administrator, in the designing of numerical limits, to promulgate design, equipment, management practices or operational standards (or a combination thereof) to protect public health and the environment. While this is a logical approach, we want to ensure that the Administrator will allow sufficient flexibility in this process. This flexibility would allow a POTW to pursue a different approach. The POTW would have to demonstrate a properly run sludge management process or have collected sufficient research data demonstrating that an alternative to the promulgated standards would provide equal protection.

LIABILIITY

Finally, Mr. Chairman, we would like to turn attention to an emerging issue of importance to all California POTWs and perhaps POTWs across the Nation.

Several California POTWs have recently learned that they will be unable to obtain insurance for "sudden and accidental" releases. This includes such releases as potential methane gas leaks or explosion and chlorine leaks. We urge your committee to review this important matter as it reauthorizes the Clean Water Act. CASA is prepared to work with you to ensure that this emerging issue does not jeopardize POTW operations.

This concludes my formal testimony, Mr. Chairman. Let me reiterate my earlier pledge, CASA is eager to work with you to fashion the necessary changes to the Clean Water Act. I would be happy to respond to any questions that you or other members may have at this time.

TABLE 1

DISALLOWED COSTS AS A PERCENTAGE OF CLAIMED COSTS ON 10 SETTLED AUDIT APPEALS IN CALIFORNIA[a]

Grantee	Docket No.	% Costs Questioned or Set Aside, Audit Report	% Costs Disallowed, Final Determination	% Costs Disallowed, Consent Agreement	Adjusted[b] % Costs Disallowed, Consent Agreement
Oroville	80-98	6.4%	6.4%	2.7%	2.4%
Auburn	81-34	8.8%	8.8%	4.2%	4.2%
North Marin	81-40	30%	16%	3.5%	3.5%
Livermore	81-58	22%	22%	2.5%	0.8%
Coachella Valley	81-61	100%	8.9%	2.3%	2.3%
Santa Rosa	81-68	26%	13%	5.3%	5.3%
Eastern	82-09,14	6.8%	5.3%	2.3%	1.2%
Lompoc	82-76	14%	2.6%	0.7%	0.2%
North Shore	82-85	90%	3.2%	0.1%	0.1%
Oxnard	83-02	26%	1.3%	1.0%	0.4%
Average		17.5%[c]	8.8%	2.5%	2.0%

[a] These 10 audits represent $60 million in claimed costs.

[b] This percentage excludes costs known to be ineligible prior to the audit.

[c] Excludes 100% and 90% figures.

TABLE 2

ANALYSIS OF THE NET BENEFIT OF SEVERAL CALIFORNIA AUDITS

GRANTEE	North Marin C.W.D.	City of Livermore	Coachella Valley W.D.
DOCKET NO.	81-40	81-58	81-61
COSTS CLAIMED	$1,097,904	$6,004,211	$4,755,266
COSTS DISALLOWED			
Audit Report	328,932(30%)	1,301,376(22%)	4,755,266(100%)
Final Determination	180,546(16%)	1,301,376(22%)	422,830(9%)
Consent Agreement	38,033(3.5%)	148,475(2.5%)	109,840(2.3%)
COSTS KNOWN INELIGIBLE PRIOR TO AUDIT	0	102,997	0
DISALLOWANCE RESULTING FROM AUDIT	38,033(3.5%)	45,478(0.8%)	109,840(2.3%)
APPARENT BENEFIT TO EPA AND STATE (@87.5%)	33,279	39,793	96,110
COSTS OF AUDIT/APPEAL			
Federal and State	15,000(est.)	15,000(est.)	15,000(est.)
Grantee Staff	11,127	10,000(est.)	28,527
Grantee Legal Counsel	8,693	0	8,887
Grantee Consultant	27,641	20,269	44,859
Total Costs	62,461	45,269	97,273
NET BENEFIT OF AUDIT	-29,182	-5,476	-1,163

TESTIMONY

OF

Joseph M. Giglio
General Partner
Public Finance Department
Bear, Stearns & Co.

before the

U.S. Senate Environment and Public Works Committee
Subcommittee on Environmental Pollution

March 27, 1985

Mr. Chairman, and Members of the Environmental Pollution Subcommittee, I want to thank you for this opportunity to testify today concerning the reauthorization of the Clean Water Act. In particular, I am pleased to share my views on Senator Chafee's amendments, S. 652, which include changes in the federal funding strategy for construction of wastewater treatment facilities.

As you may know, I have been actively involved in the problems of financing state infrastructure needs for the last three years. My firm Bear, Stearns & Co. worked together with state officials in New Jersey to develop the proposal for The New Jersey Infrastructure Bank. That proposal has provided a model for many states seeking to finance infrastructure needs, and has led to the development of key elements of federal legislation in this area.

The New Jersey Infrastructure Bank had its genesis with the problem of financing that state's enormous needs for construction of wastewater treatment facilities. In brief, the solution we developed involved the establishment of a revolving loan fund capitalized by state and federal contributions. We proposed to assign financial management of this fund, as well as revolving loan accounts for other infrastructure purposes, to an Infrastructure Bank empowered to assist local governments in financing projects.

The New Jersey Infrastructure Bank (NJIB) was designed to meet four goals:

1. to leverage public financial resources;
2. to provide a stable, continuing source of funds;
3. to minimize the local impact of changes in spending patterns or mechanisms; and
4. to reduce the state's reliance on the issuance of general obligation debt to meet capital needs, helping to insure retention of the state's triple-A credit rating.

The new Title VI of the Clean Water Act provided in S. 652 would facilitate and enhance the New Jersey initiative, and, I believe, will greatly assist other states in financing wastewater needs. S. 652 gives states much needed assurances concerning continuity of funding for the construction grants program. In addition, the new revolving loan approach allows leveraging of funds to meet long-term needs, and provides a mechanism for a phase-out of the federal contribution. Also, states will be in a much better position to operate predictable programs, and to allow local governments to proceed with project financing in anticipation of future financial assistance. I want to compliment Senator Chafee and the other sponsors of S. 652 in recognizing the need for these changes in the existing program.

I would like to submit for the record, a copy of the Working Documents on the New Jersey Infrastructure Bank prepared by Bear, Stearns & Co., which explains in detail the design and workings of the proposed Bank. Your attention should be directed to the Overview,* which summarizes the overall proposal and its major components, and to Appendix I which describes in detail the revolving loan fund for construction of wastewater treatment facilities. Appendix V also should be particularly useful in that it describes the local financing activities of the Bank, including security features of project bonds and equity loans.

---

*The overview follows this statement, the appendices referred to have been retained in committe files.

Rather than go through the details of the New Jersey proposal with you, I will comment on the state revolving fund portions of S. 652, drawing on aspects of the New Jersey work which are especially pertinent. However, I would like to give a brief overview of the wastewater loan program.

In the wastewater area, funding of projects through the Bank using zero interest loans, instead of grants, would allow nearly $2.0 billion in needs to be met over a ten-year period. This was based on a loan fund capitalized with six years of federal appropriations at the current allocation to New Jersey of $100 million annually, or $600 million, and a state contribution of $200 million. The state's needs are now estimated at about $2.8 billion, to construct nearly 300 EPA-approved projects. Without a revolving loan fund, nearly 20 years of federal appropriations at the current level would be required to start these projects, not allowing for inflation. Further, the loan fund would allow local governments to issue short-term debt to finance projects in anticipation of a takeout by the Bank at a date certain. User fees would be approximately 30% higher through loan funding versus grant funding. However, most New Jersey communities will never receive a grant under the existing program and face 100% local financing, easily at double the cost of a loan.

I was pleased to find that you would give states the option of beginning revolving loan funds in FY 1986. This recognizes the fact that some states like New Jersey have made tremendous progress in innovative financing of infrastructure and may be ready now to use federal funds in new ways. The political realities of making loans instead of grants could delay the transition until this step is required by federal law, but in the interests of meeting states' long-term needs an accelerated program would be advantageous.

It should be possible for states to meet the requirement in S. 652 that 100 percent of the federal payments into revolving loan funds be committed in any given year. Most states have well established priority lists with tremendous funding backlogs, so that loan agreements could be executed expeditiously. However, if a state chooses to use all or a portion of the federal payments as a reserve supporting the issuance of bonds to accelerate its program, it would be necessary that S. 652 recognize that this is an option for a state. S. 652 could specify that the amount of loans committed to in a given year must be at least equal to the amount of federal funds provided to the State Revolving Fund in that year. For example, if $100 in federal capitalization grants are received in a year, then at least $100 in loans must be committed in that year. But a state could choose to place the federal capitalization money in a reserve, rather than use it for a loan, using bond proceeds to make the required amount of loans.

The conditions contained in S. 652 under which loans may be made appear reasonable. As described in the Infrastructure Bank Working Documents, the New Jersey proposal contemplated 15 year loans at zero interest. This combination allowed significant acceleration of the wastewater program while minimizing the impact on user fees caused by changing from grants to loans. S. 652 provides sufficient flexibility for states to make appropriate decisions in loan programs regarding affordability and pricing for local services, with up to twenty years for repayments and as little as zero interest on loans.

Clearly a critical issue in the design of a loan program is the mechanism for insuring loan repayments. Without guaranteed repayments, the state revolving funds will not fulfill the objectives intended in S. 652. The bill requires that loan recipients establish a dedicated source of revenues for repayment of loans. The Committee might want to consider additional language concerning security for loan agreements. These requirements might include:

- Rate covenants pledging that loan recipients will charge sufficient fees or levy sufficient taxes so that all operating, maintenance and debt service expenses can be met;
- Payment of revenues by loan recipients into a Debt Service Fund held by a Trustee; and
- Deficiency agreements among the loan recipient, the State Revolving Fund and a Trustee whereby failure to make a repayment, and draw down of the reserve fund, will cause the local taxing units to levy sufficient taxes in the subsequent fiscal year to make repayments and replenish the reserve fund. Failure to follow this course of action could then result in state aid intercepts.

Section 603 of S. 652 empowers State Revolving Funds to perform important functions in addition to making equity loans. The power to refinance local debt incurred after March 7, 1985 is particularly significant. This concept also was included in the New Jersey proposal. This provision allows municipalities to move quickly to meet compliance deadlines, and in many cases to free themselves from sewer bans limiting local development, using short-term financing arrangements contingent on a take out at a date certain by the Fund. This procedure allows environmental needs to be met while containing costs to local governments. Other credit enhancements available under S. 652, including insurance and loan guarantees, also will be useful vehicles in assisting states to run full service programs for financing wastewater projects. Financing needs are likely to vary significantly among states and municipalities, and the options available under S. 652 will be valuable in meeting those needs.

The audit and reporting provisions of the legislation seem appropriate given the expenditure of federal funds. Other provisions of the bill are clearly outside my area of expertise.

In summary, S. 652 provides an effective financing vehicle for meeting the nation's clean water needs. Not only does it authorize funding over a longer period than previous versions of this legislation, but it provides for much needed flexibility in the existing funding program. This flexibility will accelerate the accomplishment of environmental goals and allow for a reasonable phase out of federal funding for wastewater projects. Replacing the existing federal grant program will be predictable state funding programs to subsidize construction of wastewater facilities for the indefinite future. I believe this legislation represents an important and effective step forward to more responsible financing of capital investment needs.

[redacted]

The following has been excerpted from the above named document.

THE NEW JERSEY INFRASTRUCTURE BANK: AN OVERVIEW

Introduction

There is growing national recognition of the serious economic and environmental implications of the country's decaying infrastructure. Sewers, water supply and solid waste disposal systems, roads and bridges, mass transit and other public facilities constitute the underpinnings of our society. The condition or availability of these systems governs not only the potential for economic growth and development in a given area, but also the quality of life and to a large extent the public health and welfare.

Statistics abound concerning the magnitude of the national problem. While the specific nature of the needs varies regionally, no part of the country is free from the generally overwhelming demand for construction or repair of public systems. In the Northeast, older cities must confront especially severe problems of rehabilitation and repair of aging water supply treatment and distribution systems as well as roads, bridges and mass transit systems. The West and Southwest typically are dependent on construction and maintenance of massive water projects to sustain growth and insure economic vitality. Sunbelt cities experiencing rapid growth must make huge investments in new sewage treatment systems, in constructing and maintaining roads and highways, and in providing new mass transit systems.

Deferred maintenance by state and local governments is largely a product of budget constraints combined with demands for increased public services such as police and subsidized mass transit. Political expediency, which favors construction of new public facilities over less visible repair of existing facilities, also has contributed. In many cases maintenance has been neglected so long that facilities cannot be repaired without massive capital investments and interim discontinuation of services.

Estimates of the cost of providing an adequate national infrastructure vary tremendously. Pat Choate, co-author of "America in Ruins," estimated the nation's total needs at $2.5 to $3.0 trillion to maintain existing levels of service. Other estimates are more modest, and critics of Choates' conclusions maintain that his figures reflect needs surveys made before the current constraints on spending by the federal government were obvious. Nonetheless, it is clear that under any analysis the cost of making all repairs far exceeds any present mechanism for directing funds to meet that need.

Legislation has been introduced in both Houses of Congress to conduct a national inventory of infrastructure needs and to establish a capital budget for the purposes of isolating capital expenditures. While this knowledge will be valuable in the long term, state and local governments face immediate, severe needs for infrastructure financing. These needs have been greatly exacerbated by cutbacks in federal funding. States cannot postpone attacking this problem pending confirmation or clarification of need at the national level.

Until now, moderately successful crisis management has made it possible to meet short-term repair needs of a crumbling infrastructure. But the problem grows, as does the cost of the solutions. In repeated efforts to get through the budget year, state, county, and municipal governments have found it easiest to drop those budget items which lack visibility or a persistent constituency. As a result, capital needs have been consistently underfunded. Now, with the same difficulties confronting the federal budget, it has become clear to all states that there are no magical, long-term resources to meet capital needs and that short-term federal bailouts are unlikely.

New Jersey's Needs

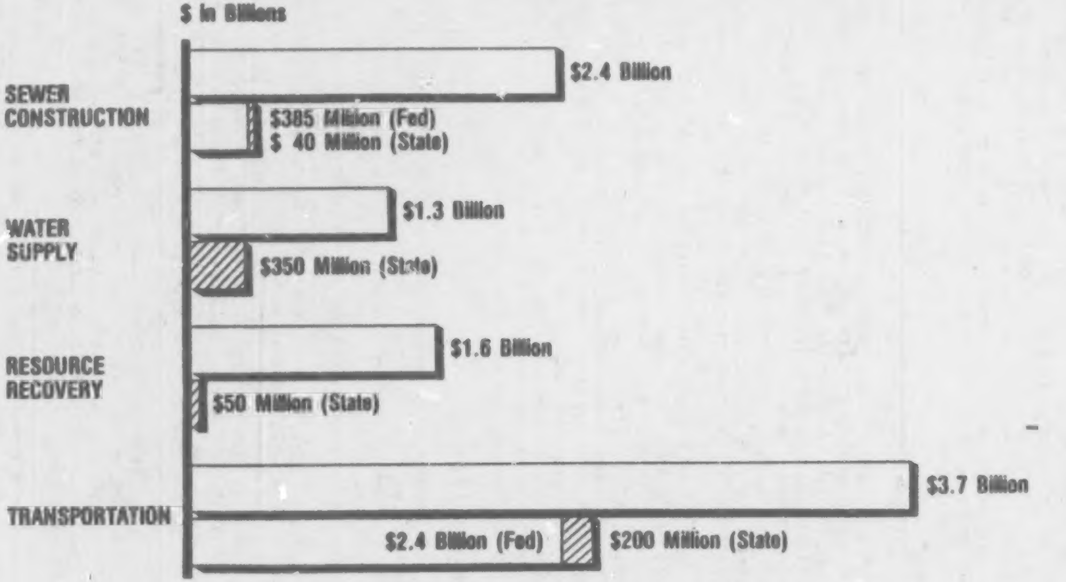
In New Jersey deteriorating public systems -- sewers, solid waste disposal systems, water mains, roads, bridges and transit systems -- are barriers to economic growth and to the attainment of mandated environmental standards. These deficiencies directly undermine the State's program to attract and retain business investment.

Federal funds traditionally have provided a major source of capital for building and improving New Jersey's infrastructure, but for the most part these funds have been cut substantially in recent years. New Jersey's contribution to infrastructure financing has been generated principally from sales of State general obligation bonds authorized by the voters for specific purposes. To maintain the States's fiscal integrity and its triple-A bond rating, the dollar amount of bonds issued each year must be carefully restricted to amounts supportable at prevailing revenue levels. This can result in long delays in implementing authorized programs and precludes new bond acts from being fully funded for many years. Further, there can be no certainty that projects will continue to be authorized if the voters must consider new bond proposals every few years.

Figure 1 summarizes the cost of meeting New Jersey's infrastructure needs in four major areas, as compared to the fiscal resources currently authorized for meeting those needs.

FIGURE 1

Needs vs. Projected Resources



Wastewater Treatment. The State's sewage treatment construction program is confronted with a total need, estimated conservatively, of $2.4 billion for construction of 237 projects required to meet federally mandated clean water goals. This $2.4 billion is in addition to the $1.8 billion in federal funds already spent by the State in this program. Half the projects -- $1.2 billion -- are now ready for construction and the remaining $1.2 billion will be ready within the next four years.

In December, 1981, the Federal wastewater treatment construction grants program was authorized for funding for fiscal years 1982-1985, at approximately half the level of the previous ten years. During that four year period New Jersey is authorized to receive only $385 million, with which only 11 of the 237 eligible projects can be partially or fully funded. With the existing FYs 1982 and 1983 appropriations, only 5 projects can be funded.

The 1981 amendments to the Clean Water Act also mandated that beginning in FY 1985, federal grants would be made for only 55% of the eligible project costs, as opposed to 75% grants in prior years. To stretch its federal funds, New Jersey will make 65% grants beginning with the FY 1982 appropriations. In addition to federal funds, New Jersey traditionally has made State matching grants of 8% of the eligible project cost, which will be provided instead in the form of loans beginning in FY 1983. Under previously authorized State Bond Acts, $40 million has been allocated for funding of wastewater treatment projects.

Water Supply. In 1981, New Jersey completed a Water Supply Master Plan, which contains recommendations for the construction of certain new water supply facilities, testing and repair of interconnections, and repair and rehabilitation of antiquated systems. A five year action plan was developed which includes activity in each of these areas at an estimated direct cost to the State of $350 million. Subsequently the voters approved a $350 million Water Supply Bond Act to address the need detailed in the action plan. Through the year 2000, the total need for investment in all water supply systems, including those privately owned or owned by local governments, is estimated to be about $1.3 billion. Beyond the action plan, this allows for the rehabilitation and upgrading of treatment plants, some $200 million in additional rehabilitation of supply systems, and the development of new water supply sources.

Solid Waste Disposal. Landfill capacity for solid waste in New Jersey is rapidly being depleted and costs of disposal are rising due to shortages of sites, stricter environmental regulations and closures. Future siting of landfills will be extremely difficult, but resource recovery offers a promising alternative. However, landfill costs are at present considerably lower than those projected for resource recovery based on a unit cost of disposal. This presents a dilemma to local elected officials who need an alternative to landfills but are reluctant to endorse resource recovery because of its higher near term costs. The result is rapidly depleting landfill space, insufficient long-term capacity, and little progress toward resource recovery implementation.

Resource recovery, while representing the only feasible long-term solid waste disposal solution, is difficult to implement, requiring large investments and complex financing plans. Construction costs range anywhere from $70 million for a 750 tons per day facility, to up to $225 million for a 2000 tons per day facility capable of serving the needs of the more densely populated counties in the northeastern part of the state.

New Jersey has developed a Statewide Solid Waste Management Plan which estimates that 18 resource recovery facilities will need to be constructed before the end of this century in order to meet New Jersey's disposal needs, at a combined cost of close to $1.6 billion.

In recognition of the need to encourage counties to construct the necessary facilities, as well as for other purposes, New Jersey voters approved the Natural Resources Bond Act of 1980. This act authorized the sale of $145 million in State general obligation bonds, with $50 million allocated to resource recovery projects. The proceeds of the bonds, once appropriated, may be awarded by the Department of Environmental Protection to counties as grants and/or loans for the planning, design and construction of resource recovery facilities. Grant awards were limited to at least 20%, and not more than 33%, of project construction cost.

Transportation. The Department of Transportation estimates capital needs for highways, bridges and mass transit to be about $3.7 billion in New Jersey over a seven-year period. Over this period the State can expect to receive about $2.4 billion in federal funds. About $200 million in authorized State Bond proceeds should be available during this period for highways and public transportation.

These few examples clearly illustrate the wide disparity between the State's need for infrastructure investment and the resources which might be available to meet that need. If additional infrastructure requirements beyond those analyzed in these plans are considered, this disparity becomes even greater.

New Jersey Infrastructure Bank

On September 29, 1982, Governor Kean announced his proposal for the New Jersey Infrastructure Bank, as a solution to the dilemma posed by this funding gap. The Bank is the State's plan for meeting capital needs and represents a major shift in the way New Jersey addresses its capital financing problems. The New Jersey plan is the first initiative of its kind by a state in response to the continuing reductions in federal funds for infrastructure, and is the first plan for a long-term commitment to infrastructure.

There were several major objectives in the development of the Bank. The first was to find an effective means of leveraging public financial resources to meet a greater share of the State's infrastructure needs than was possible under existing programs. Related to this was the need to provide the State with a continuing, reliable source of funds for the long term for infrastructure investment. At the same time, it was essential to create a financing vehicle which minimized the local impact of changes in State funding procedures and of cutbacks in federal funding. A final objective was to decrease the State's reliance on issuance of general obligation debt to finance capital expenditures, by using funds raised in this manner more efficiently. Consistent with this goal was the recognized importance of retaining New Jersey's triple-A bond rating.

The Infrastructure Bank proposal is the result of work begun in early 1982 by State officials in the Departments of Environmental Protection, Treasury and Transportation, and by financial experts in the firm of Bear, Stearns & Co., and the Merrill Lynch White Weld Capital Markets Group. The Bank represents a comprehensive effort by the State to tap all available funding sources to make a changing situation work to the advantage of its communities. It will not instantly solve all of New Jersey's infrastructure problems, but it will maximize the use of existing resources in addressing these needs more rapidly than in the past through a coordinated, long-range planning, development and financing process.

Operation of the NJIB

The Bank would be a non-profit institution which would function solely as a financing vehicle for infrastructure programs. It would be intended to function in this capacity for the indefinite future. Figure 2 summarizes the flow of funds of the Bank.

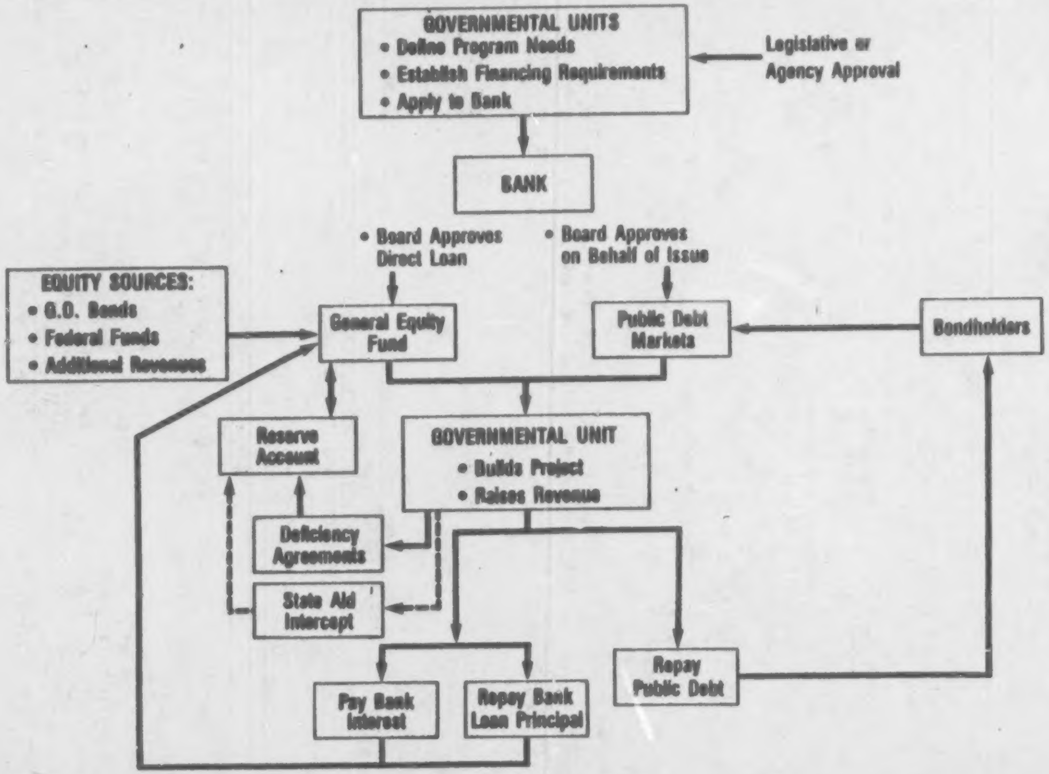
The Bank would be capitalized from three sources. First would be the proceeds of the State general obligation bonds authorized for wastewater, water supply, resource recovery, transportation and other purposes, which would be appropriated to the Bank. Debt service on these bonds would be paid by the State General Fund. Second, the Bank would receive contributions of federal grant funds, such as those for wastewater treatment, as well as other federal appropriations made specifically to capitalize state banks. Third, the Bank could receive appropriations of specific State revenues.

There are three basic ways in which the Bank would function to leverage the capital resources it receives. Primarily the Bank would operate revolving loan funds to finance specific types of projects. Funds would be deposited in special loan accounts within the Bank dedicated to the program purpose for which the general obligation bonds, federal grants or revenue appropriations were authorized. Funds would be lent to local governmental units at low or no interest for some share of the cost of projects. Loan repayments to these special accounts would maintain the equity capital of the Bank and provide a source of funds for subsequent loans. Any interest earned on loans or on temporary investments by the Bank would result in growth in the Bank's capital.

The Bank also would serve as the statewide financing vehicle for the local share of project costs. At the request of a community, the Bank could issue bonds through the public debt market on behalf of the community for that share of the project cost not covered by a loan. The Bank could pool borrowing requirements of localities to create Bank bond issues of sufficient size to result in savings in financing and issuance costs otherwise unavailable to those communities.

FIGURE 2

New Jersey Infrastructure Bank
Functional Diagram and Flow of Funds


GOVERNMENTAL UNITS
• Define Program Needs
• Establish Financing Requirements
• Apply to Bank
Legislative or Agency Approval
BANK
• Board Approves Direct Loan
• Board Approves on Behalf of Issue
EQUITY SOURCES:
• G.O. Bonds
• Federal Funds
• Additional Revenues
General Equity Fund
Public Debt Markets
Bondholders
Reserve Account
GOVERNMENTAL UNIT
• Builds Project
• Raises Revenue
Deficiency Agreements
State Aid Intercept
Pay Bank Interest
Repay Bank Loan Principal
Repay Public Debt

Finally, the Bank would function as the vehicle through which the State itself could issue revenue-backed bonds for various infrastructure purposes. This would be possible where a new or existing source of revenues was earmarked or dedicated to the Bank to meet debt service requirements, thereby enabling the Bank to raise capital for particular needs of the State.

Security Mechanisms

A comprehensive set of security mechanisms has been developed to insure that: 1) the Bank's capital is retained through the repayment of equity loans; and 2) debt service on local share bonds is paid in a timely manner, thereby protecting bondholders and local credit ratings. (See Appendix V.) These procedures are central to the Bank's financing goals.

Loans or bonds would be secured in five ways:

(a) Rate covenants pledging that the local unit will charge/levy sufficient fees/taxes so that all operating and debt service expenses can be met.

(b) Pre-funding of loan repayments or debt service through payment of local unit revenues into a fund held by a Trustee.

(c) Reserve funds held by the Trustee equal to maximum annual principal and interest on equity loans or projects bonds.

(d) Deficiency agreements to insure that reserve funds are replenished if tapped to make a loan repayment or debt service payment.

(e) An intercept of State aid if a deficiency agreement obligation is not fulfilled.

Legislation

In October, 1982, enabling legislation for the Bank was introduced in both Houses of the New Jersey Legislature and was referred to the two State Government Committees for consideration. The legislation creates the Bank, establishes its administrative procedures, and defines its powers and functions. On February 22, the Assembly State Government Committee reported a bipartisan committee substitute to the original legislation. (See Appendix VII.) On April 25, the bill was referred to the Assembly Revenue, Finance and Appropriations Committee.

Additional legislation is necessary at the State level for the Bank to function fully. Next fall the New Jersey voters will be asked to pass a referendum allowing loans made from State bond funds to be repaid to the Bank. Under existing law such loans are repaid to the General Fund, which obviously would deplete the Bank's capital.

Federal legislation is required to make federal grant funds available to the Bank. An amendment to the Clean Water Act has been introduced which would provide states the necessary flexibility to make loans instead of grants with their annual funding allocations.

In addition, two pieces of national infrastruction legislation have been introduced in the U.S. Senate to capitalize state banks. (See Appendix VIII.) On February 14, Senator Domenici, Chairman of the Senate Committee on the Budget, introduced legislation (S.532) which authorizes appropriations of $10 billion over three years to capitalize state infrastructure banks. Senator Bradley is among the co-sponsors of that bill. The major provisions of the legislation were modelled after the New Jersey Infrastructure Bank proposal. On March 8, Senators Stafford and Randolph, Chairman and Ranking Minority Member of the Senate Environment and Public Works Committee, introduced legislation (S.724) to capitalize state banks with appropriations of $5 billion each year for ten years. Both bills include an amendment to the Clean Water Act allowing either loans or grants to be made with wastewater treatment funds.

Administration

The Bank would be located in the Executive Branch of the New Jersey Government, within the Department of Treasury. Its membership would consist of eleven directors, as follows: the State Treasurer, the Commissioners of the Departments of Environmental Protection, Transportation, and Community Affairs, who are ex-officio members; two persons appointed by the Governor upon recommendation of the President of the Senate and two persons appointed by the Governor upon recommendation of the Speaker of the General Assembly; and three directors appointed by the Governor with the advice and consent of the Senat

The directors would have general responsibility for the functioning of the Bank. (See Appendix VI.) They would establish credit policy and would approve each equity loan and debt financing and the terms of each transaction. The directors would appoint an executive director who would be responsible for the day-to-day operations of the Bank, and for supervising a small staff of three or four full time professionals.

The Bank would have the ability to fix and collect administrative fees or charges for its services, although this power probably would be unnecessary. Instead, the operation and administration of the Bank would be covered by interest earnings generated by equity fund balances held by the Bank.

Summaries of Program Operations

Wastewater Treatment. For sewer construction a revolving loan fund would be established in the Bank to make low or no interest loans instead of grants, for some share of project costs. A sophisticated model has been developed to determine the effectiveness of the loan fund in meeting the State's total need for sewer construction, given a certain set of assumptions, and the effect on user fees for any community using that same set of assumptions. The goal in the modelling effort was to determine how to reach the greatest number of projects in a given period of time while minimizing user fee increases. (See Appendix I.)

Figure 3 summarizes the base case for the sewer construction revolving loan fund, which was derived using the model. A minimum of $600 million in federal grant funds would be deposited into the fund in annual increments of $100 million, following Congressional appropriations for the wastewater treatment construction grants program. Because six years of federal appropriations would be required, the existing authorization for the program in the Clean Water Act would have to be extended up to four years, depending on when the State could begin making loans instead of grants. In addition to federal funds, the State would contribute 8% of the total $2.4 billion need, or $192 million, to the fund over the same six year period. These two funding sources would capitalize the loan fund with $792 million.

Using this capital, low or no interest loans would be made for 63% of the project costs, with a fifteen year repayment period. Over a ten year period, $1.2 billion in loans could be made which together with the 37% local share would lead to construction on $1.9 billion in projects. Under this scenario user fees would increase no more than about 30% over what a community would pay if it received a 63% grant for project construction (Figure 4). However, more than 200 of the 237 projects on the sewer priority list cannot expect to receive a grant. For these communities a bank loan would cut user fees at least in half compared to the costs of financing projects with 100% local debt.

The existing federal sewer construction program would have to be continued for nearly 20 years at existing levels to construct all the eligible projects in New Jersey. The federal exposure in New Jersey alone could exceed $2.0 billion when the effects of inflation on project costs are taken into account. At the end of the funding period, no money would be available for additional work.

Under the Bank, a minimum of six years of federal appropriations, or $600 million, would be required to meet all the clean water needs. Construction could begin on every eligible project within about 10 years, thereby reducing the increases in project costs due to inflation. When loans are repaid, at least $800 million would be available for future funding. The very nature of the loan program would encourage development of the most cost effective projects possible to meet discharge requirements, resulting in additional efficiencies in project financings.

If additional federal appropriations were received, needs could be met even more rapidly, at less cost to users, with a larger pool of funds accumulated for future funding. If the federal program is not extended, maximum use of existing grant funds in a loan program becomes even more critical, since it guarantees all projects will eventually be funded.

Water Supply. As with the sewer construction program, a revolving loan fund would be established in the Bank for water supply. (See Appendix II.) This fund would be capitalized with $65 million in State general obligation bond proceeds authorized in the 1981 Water Supply Bond Act for loans to localities for rehabilitation of public water systems.

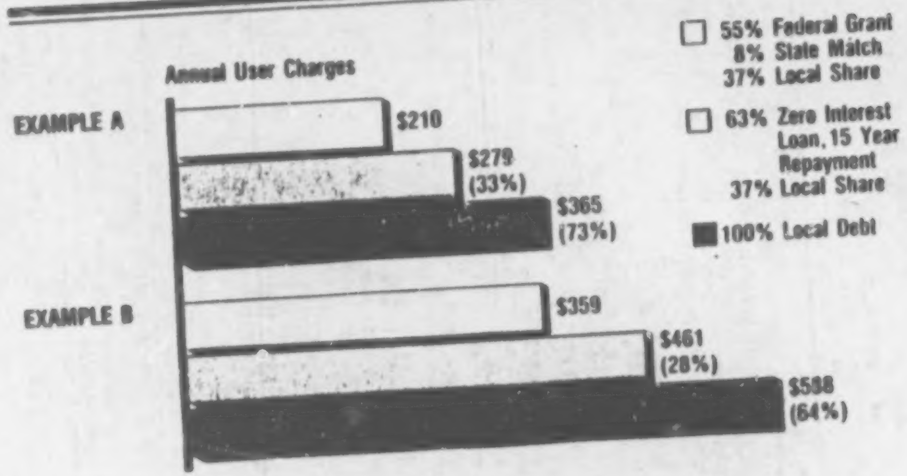
FIGURE 3

Example of Sewer Construction Revolving Loan Fund

Equity	
Federal	$ 600 million
State	$ 192 million
Total Loans	$1,209 million
10 Yr Loan Origination Period	
15 Yr Repayment, Interest Free	
63% of Project Cost	
Local Share	$ 710 million
Total Construction	$1,920 million

FIGURE 4

Sewer Construction:
Annual User Charges/Household



A program already has been developed to administer these loans, which are being made at interest rates of slightly below market rate and with very favorable repayment schedules compared to those which would be available from banks or through the issuance of revenue bonds.

This water supply loan program would be transferred to the Bank for administration. Over ten years the $65 million could be leveraged to produce about $207 million in water supply loans. The Bank's ability to combine external borrowings with equity loans would enhance the cost of capital for water systems. If federal funds become available for water supply, as for wastewater, significant leverage could be achieved in expenditure of these funds through a revolving program in the Bank.

Solid Waste Disposal. It is evident that few projects could benefit from grants using the $50 million available from the 1980 Natural Resources Bond Act, given the high cost of constructing resource recovery facilities. However, these funds could be used very effectively in a revolving loan program in the Bank. (See Appendix III.)

The $50 million in State equity would be used to make no- or low-interest loans for the planning, design, and construction of resource recovery facilities. The loans would be made over ten years with 15 year repayment schedules. Due to the revolving nature of these loans, the $50 million in State equity could be leveraged to produce approximately $72 million in loans over this period.

The receipt of a Bank loan by an entity constructing a facility would result in substantial benefits. The loan would reduce the amount of bonds which must be issued to finance the project, which in turn would reduce the debt service burden which must be borne by those receiving the facility's services.

Transportation. The Bank's transportation program would not operate on a revolving loan basis, primarily because continued funding for the Federal Highway Trust Fund is assured over the long term. Nonetheless, New Jersey has need of a special program to guarantee stable funding for the State share of transportation costs. (See Appendix IV.) A significant portion of this need consists of providing the State match for federal highway and transit appropriations.

The Bank would provide stable capital funding principally by issuing revenue bonds backed by revenues earmarked or dedicated to the Bank for that purpose. For example, 2¢ of the State's existing gas tax and $40-$60 million in additional transportation revenues could make up the initial source of funds. Ten year revenue bonds based on these revenues would generate about $200 million annually for five years for transportation. To maintain a perpetual program, an additional source of revenues would be required after five years.

Funds generated in this manner by the Bank would assure a guaranteed State match of about $130 million annually for federal highway and transit funds. This amount is adequate to meed the increased State allocation that resulted from the new federal gas tax. It would assure a predictable level of funding so that long-term projects could be initiated and advanced on a guaranteed basis. In addition, some $70 million could be generated annually to be used for 100% State-funded highway projects and for a major State local aid program. These programs would represent a major breakthrough in transportation policy in New Jersey.

Conclusion

The New Jersey Infrastructure Bank is a potential national prototype for states seeking solutions to the critical problem of construction and repair of infrastructure. It is a thorough and sophisticated proposal to deal with a problem common to all states and regions of the country. Through this Bank, New Jersey can provide to its citizens the basic underpinnings to economic growth and environmental improvement.

The Bank represents a feasible and workable alternative to programs of the past. It allows New Jersey some measure of freedom from the current uncertainties of federal funding, while maximizing the use of any federal funds which are received. Although the Bank's effectiveness is directly enhanced by federal contributions, its success is not wholly contingent on massive federal subsidies. New Jersey will make use of any capital contributions over the long term, and thus, over time, reduce the demand on the federal government for expenditures on infrastructure programs. By combining all resources in the Bank and managing funds more realistically than in the past, New Jersey can insure a stable, continuing and growing source of funds to meet the demands for an adequate infrastructure and a clean environment.

Pressure on the State government to fund capital needs through issuance of general obligation debt will be greatly reduced by the Bank. This not only will help maintain the State's triple-A credit rating, but will be reflected in the credit ratings of local governments.

Local governments will receive financial assistance from the Bank where otherwise they would be left largely unequipped to deal with enormous financial needs. This kind of security will be unique in the history of capital needs programs in New Jersey, which generally have suffered from a crisis management approach. Further, costs to individual users of local facilities will be minimized by the Bank's programs.

The investment in public facilities which will result from the Bank is expected to have a significant effect on job creation in New Jersey. It is estimated that the sewer program alone will result in 50,000 jobs over the next ten years. The economic growth which is tied so closely to an adequate infrastructure obviously results in an expanding job market beyond the initial opportunities for employment.

The problem of infrastructure financing has become a national issue in recent months. New Jersey has taken a first step in proposing a solution to the problem. The solution draws upon all levels of government and is expected to facilitate investment by the private sector. This comprehensive approach is essential for economic and environmental progress in the decades ahead. It is a realistic solution to a very real set of problems.

TESTIMONY
OF THE
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION, U.S. SENATE
CONSTRUCTION GRANTS TRANSITION ACT OF 1985 (S. 652)

MARCH 27, 1985

Mr. Chairman, we appreciate having this opportunity to appear today to provide testimony regarding the Construction Grants Transition Act of 1985 submitted by Senator Chafee on March 7, 1985. My name is Kermit L. Prime, P.E. I am Chairman of the National Society of Professional Engineers (NSPE), Legislative and Government Affairs Committee and also a Managing Principal in the Orlando Regional Office of Boyle Engineering Corporation, an international consulting engineering firm.

With a membership of approximately 75,000 individuals from every field of the engineering profession and every state in the union, one of NSPE's primary missions is to serve the public by offering viewpoints on matters of public policy in which engineering background and expertise are pertinent. The nation's Clean Water Act certainly falls into this category. Because of the diversity of our membership, we view this program from many differing perspectives. Engineers have been involved in all aspects of our nation's water pollution control efforts for more than a century from design through construction, into operation. In addition, our services are called on to develop user charges and financing mechanisms. We have had a strong interest in the funding aspects of the Clean Water Act since its inception in 1972. We are proud to say that the engineering community has been among the first to recognize that the grants program may, in fact, be counterproductive to the goals of the Act. In 1983 we gave testimony on two occasions during the hearings before the House Subcommittee on Water Resources regarding possible amendments to the Federal Water Pollution Control Act. In this testimony, we strongly recommended termination of the grants program and a transition to loan assistance. Copies of the record of this testimony are attached hereto as Appendix A.*

---

*Retained in committee files.

The engineering community takes seriously the national priority of reducing the federal deficit. Many of us have built our careers to serve another national priority - clean water. Balancing competing forces is nothing new to engineers. We are confident that both national priorities can be well served if their relationship is adequately understood.

During in the seventies, the Congress took charge of the national clean water efforts - preempting existing state and local programs for the establishment of goals and standards and the funding of public construction. It was as if state and local programs were diagnosed as sick, forcibly hospitalized, and then treated with heavy injections of morphine. It is not surprising that the entire water pollution control program became addicted - and now, virtually no local sewage project will move unless it has a federal grant. In 1981, when the federal grant program was cut back, the progress in capital construction was reduced in direct proportion to the cuts. EPA grants have become a disincentive and a bottleneck to construction of municipal water pollution control projects. As long as there is a chance of a future EPA construction grant, no municipality will build its project until the grant money is provided. It seems incredible, but we are spending $2.4 billion per year to continue an addiction that restricts the progress towards clean water goals - and the backlog of projects needed to meet the 1988 goals is known to exceed $30 billion.

It is not effective, twelve years after the 1972 Act, to say that the cleanup requirements of the Federal Clean Water Act are not tied to the financial aid part of the same law. They were passed together, and some states have written a connection into state law. Many projects are phased or segmented, as a consequence of the limited availability of EPA grants, and these communities cannot be abandoned in midstream. It would also be disruptive and very damaging to the clean water program for Uncle Sam, who was the "pusher," to demand that all the addicts go "cold turkey." The only rational and equitable solution is to an effective transition. The Congress must deliver on the 1981 promise of a ten-year financial assistance program, but we must also structure the program to end the federally-induced dependence on grant money and to restore the expectation and the ability for state and local programs to be self-sustaining.

We are here before you today to offer some background regarding the rationale for this position, to discuss possible alternatives, and to recommend specific areas of improvement to the Construction Grants Transition Act of 1985 introduced by Senator Chafee in the form of S.652.

THE ADVANTAGE OF LOANS OVER GRANTS

We see evidence that a consensus is emerging among the technical community regarding certain key points related to funding our nation's critical environmental needs. As noted by Senator Chafee in his remarks while introducing the proposed Construction Grants Transition Act of 1985, this nation has spent over $56 billion in tax dollars for the construction of Publicly-Owned Treatment Works (POTWs).

The most recent EPA Needs Survey indicates that even greater sums are still required today to bring remaining POTWs into compliance with the Act's goals. We believe the current Construction Grants Program is counterproductive to meeting these goals because it brings with it several inherently negative characteristics. First, the procedural requirements associated with the Construction Grants Program seriously delay POTW construction. EPA's data indicates that it now takes 8 to 10 years to complete the average project within the Construction Grants Program. The average program, not encumbered with these requirements, can be completed in 2 to 4 years less time! These delays have had tremendous inflationary effects on the facilities being constructed, while simultaneously deferring much needed pollution abatement. Second, grant funding has not and will not be sufficient to meet the current and projected needs. The current spending rate for POTWs is driven by Federal grants and this simply will not meet the goals of the Clean Water Act as projected by the EPA Needs Survey. This is particularly true when one considers the inflationary impact on the construction of these facilities. Finally, the very existence of a grant program can actually discourage communities from proceeding with POTW construction. It has been politically unattractive for community leaders to proceed without a grant program (even though they have little or no reason to believe that such a grant will be forthcoming), when their constituents see other communities receiving such grants. Accordingly, communities that could afford to move expeditiously, but are not being funded under the grant program, are choosing to wait for grants to move ahead.

We believe these fundamental flaws within the Construction Grants Program, together with the deficit pressure to reduce Federal spending makes the transition to some other form of Federal support for POTW financing both an appropriate and an urgent objective. In determining alternative forms of support, five essential considerations should be given:

a. Some form of financial assistance is required to meet the nation's environmental goals related to POTW funding. This assistance should allow at least as much POTW construction annually as has been achieved with $2.4 billion per year of construction grants, preferably more. At current funding levels the Construction Grants Program, as currently implemented, will not meet the 1988 deadlines.

b. The funding program should lead to financial self-sufficiency. It should promote the development of rate structures which will move the units of local government toward a system that reflects the actual costs of providing continuing POTW needs.

c. At the same time, control and decision-making should be moved toward the units of local government to the maximum extent possible. This means minimizing the Federal red tape and intervention. Doing this would allow the program to accelerate by providing greater flexibility and eliminating the roadblocks unrelated to water pollution control.

d. We should move the program away from grant funding and toward programs which can, in fact, meet the environmental goals of the Act in a timely manner.

e. The extent of support in terms of specific amounts and duration of financial assistance should be firmly established.

Program stability is an extremely important part of the program; otherwise, local governments cannot properly plan for their projects.

Low-interest loans can be structured to reduce the impact on rate payers in an amount equal to or greater than that offered through the Construction Grants Program. This concept may seem elusive to those who are not intimately familiar with municipal financing. To illustrate our point, one must understand the relationship between the construction costs of a project, the Federal share under current grant assumptions and the overall cost of financing the local share. Assuming a project where 100 percent of the construction cost is eligible for Federal funding, a simplified model would be as follows:

	Costs ($ million)
-- Eligible portion of Project	$10.0
Federal share	(5.5)
Local share	$ 4.5
-- Financing Costs (@ 20%)*	0.9
-- Bond Issue	$ 5.4

* Assumes capitalized reserve account.

Assuming level debt service (principal and interest) for a period of 30 years at 10 percent to 12 percent interest, the annual payments would be approximately $550,000 to $650,000. Accordingly, over the 30 year period, the community would pay something between $16,500,000 to $19,500,000 in principal and interest. Deducting the amount of the bond issue indicates that between $11 to $15 million is paid in interest alone. Note that this $11 to $15 million is over double the amount of the Federal grant. If there had been 20 to 25 percent of the cost of the project that was ineligible for Federal funding (which is quite common under current regulations), and therefore had to be financed by the local community, the interest cost could easily have been three times the amount of the Federal grant. Accordingly, techniques which could serve to reduce these interest costs could easily equal the impact of the Federal grant. These concepts are explained further in the paper attached as Appendix B.

This is further illustrated by an understanding of the graph contained in Figure 1 attached to the back of this testimony. This graph indicates that approximately the same user charges would be realized with a 100 percent loan with interest rates in the range of 2 to 5 percent as with a 55 percent grant, again assuming 100 percent project eligibility. As more of the project becomes ineligible for Federal grant participation, the equivalent interest rate is increased rapidly.

In general, we support Senator Chafee's bill, because it tries to deliver on the promise of Federal assistance while gradually weaning the local/state agencies from their addicton to Federal grants. However, we do have several concerns regarding the bill, and we think there are a few elements which could be handled more cost effectively. Instead of starting in 1989, we would like to immediately begin the shift from grants into alternative support mechanisms. In NSPE's opinion, the bottleneck could be eliminated next year, if Congress would shift the Federal financial support from grants to interest subsidies and guarantees, spreading the Federal assistance dollars over the life of the state or municipal bond issues. In this way, the local agencies could move forward NOW to achieve the mandatory 1988 water quality goals - and the excuse of waiting for a Federal grant would no longer exist. For the next four years, the Federal outlay for this program to serve all eligible projects would be substantially less than $2.4 billion per year but the commitment would continue for the life of the bonds.

Later in this testimony we offer detailed comments regarding S.652. In summary, these include:

a. The language should be changed to eliminate the excessive red tape on local government from continuing Title II requirements for projects funded through a State Revolving Fund (SRF).

b. The date for implementing a loan program should be moved forward.

c. The bill should require that at least 60 percent of project costs financed by a SRF loan program be used to meet the enforcable requirements of the Act. This allows local needs to be met, yet assures the goals of the Act.

d. Language should be clarified to assure that states can provide loan guarantees and interest subsidies through SRFs.

e. Special attention may be appropriate to satisfy the backlog of needs of the very large and the very small communities.

Accordingly, we believe Congress should implement a loan program as expeditiously as possible. In fact, a workable loan program could be implemented that would accelerate the construction of these much-needed facilities while not increasing, and possibly even decreasing, the Federal deficit.

NSPE RECOMMENDATION

NSPE developed another alternative to the Wastewater Treatment Construction Grants Program in 1984 which is attached as Appendix B. In this document, NSPE recommended an alternative which consists of a combination of: (a) loan guarantees, (b) adjustable rate bonds, and (c) interest subsidies (when the annualized interest rate, paid by municipalities exceeds 5 percent).

The above loan assistance program would be offered to units of local government upon an affirmative determination that they meet the following criteria:

-- a State certification that at least 60 percent of the total project cost to be funded under the program relate to meeting the current "enforceable requirements" pursuant to the Act;

-- a State certification that the project, when completed, would be in compliance with State and Federal water quality standards; and

-- a Determination by the appropriate Federal Agency that the unit of local government had submitted a suitable Financial Plan demonstrating and that it had identified a revenue source of sufficient magnitude to repay its obligations under the bond issue.

Upon meeting the above criteria, the Federal government would issue a certificate committing to guarantee the debt repayment. This certificate could be included in the official statements issued by the municipality thereby reducing the risk to bondholders. If a default occurred, the Federal government would provide all or a part of a payment to the extent necessary to meet the payment obligations to the bondholders. If the Federal government were to provide financial assistance under this guarantee provision, it would have the right to recover those costs from the unit of local government in subsequent years. Statutory authority could be given for the Federal government to require that the municipality adjust its rates and/or charges as appropriate to return to a sound financial basis. Unlike some other programs that have been the subject of Federal guarantees, these POTWs involve substantial collateral assets which can, and should, generate sufficient revenue to repay the debt.

The bonds could be issued to the private sector, as is now done to finance the local share of most programs, as short-term variable rate obligations. The intent of the short-term variable rate instruments would be to reduce the degree of risk to the bondholders related to the effects of inflation. This should cause an attendant reduction in the interest rate charged.

Debt retirement would include interest plus annual principal payment of at least 2 percent of the original amount of the bond issue. In no case would the Federal guarantee extend beyond 30 years from the date of the original bond sale for a project.

As a condition precedent to the Financial Plan approval, the municipality would be required to develop a system of rates or fees to generate revenue sufficient to repay its debt obligations for the bonds, plus cover the costs of operation, maintenance and renewal and replacement costs. If appropriate to further ensure adequate resources, an additional coverage ratio could be required.

If in any term, the interest rate for the bonds was above 5 percent, the Federal government would make payments to the unit of local government in the amount of the difference between the interest rate charged by the private bond market and the 5 percent interest goal -- in other words, the interest subsidy.

The current Construction Grants Program would be continued until the projects which received phase-segmented funding during or before fiscal year 1985 are completed. Beginning in fiscal year 1986, Congress would provide that no new projects would receive Construction Grants Program funding except as set forth below.

Large systems, involving projects wherein over $50 million is needed specifically to meet "enforceable requirements" under the Act, could be considered for some grant participation annually by Congress on a line item budget basis. Communities of less than 10,000 people as of 1984, would be eligible for combination grant and loan assistance under the existing FmHA program. Any project for which a municipality elects to receive funds through either of these sources after 1986 would not be eligible for funding under the loan program described above.

We make this proposal because it appears that, even under pessimistic projections regarding: a) default rates on the guarantee, and b) interest subsidy charges, Federal funding commitments equivalent to those contemplated with the Construction Grants Transition Act of 1985 could generate loans supporting $50-60 billion in new construction over the next decade.

OTHER ALTERNATIVES

By memo dated December 14, 1984, EPA Assistant Administrator for Water, Jack E. Ravan, transmitted to the EPA Administrator the "Study of Future Federal Role in Municipal Wastewater Treatment". This Study recommended creation of SRFs. The Study concluded that states could be given the option of using the funds to make direct loans to municipalities or to provide seed money for state-issued bonds, thus effectively "leveraging" the Federal seed money 2 to 5 times. In general, this concept appears workable and we believe it is a viable alternative to the continuation of Construction Grants.

Our major concern with the proposal is that it does not allow sufficient funds in the early years to meet the enforceable requirements of the Act on the time schedule set forth in EPA's "National Municipal Strategy" published on January 23, 1984. It does provide that SRF funding could be used to refinance debt incurred by municipalities in meeting the 1988 deadline. Thus, the municipalities have to take the risk of financing their own projects and incorporating rates or user fees adequate to repay that entire debt without assurance that the SRF funds would be available to meet their needs. Further, the EPA analysis does not appear to consider the negative impact of inflation on the recycled funds. This could have a major negative impact on the effectiveness of future or recycled monies.

The EPA proposal is quite attractive in the manner that it deals with core needs in a flexible manner. In addition, NSPE would strongly endorse the EPA position related to the elimination of Title II and other Federal requirements. The EPA position was stated as follows:

> "Because the SRF concept is fundamentally and philosophically different from project grants, and to encourage state and local participation in the SRF concept, the Federal government will not require that Title II requirements and most other Federal laws apply to projects receiving financial assistance from SRF. To ensure proper management, overall SRF requirements (such as use of state priority lists, audits, environmental assurances) would be applicable, but kept to a minimum." (underlining added).

The EPA proposal would allow the states to initiate their SRFs on their own timetable, but they are offered a bonus for early participation. Recognizing the influence of the larger metropolitan areas, and the significant needs of the smaller communities, we feel that a stronger incentive needs to be developed, or statutes which require implementation of the SRF at an early date.

Subsequently Senator Chafee introduced the Construction Grants Transition Act of 1985 on March 7, 1985. This bill would authorize comparable funding levels through 1994. It would begin the transition to SRF concept on a firm schedule. The options given the states regarding the use of SRF funds appears consistent with the EPA proposal. An important difference is the requirement that the states contribute to the SRF an amount equal to 15 percent of the capitalization grant.

Another major difference is the requirement that SRF loan recipients would meet the same requirements as would be applicable to grant projects funded under Title II.

ANALYSIS OF S. 652

As previously stated, we applaud the fact that this bill would move the program away from grants toward loans. However, we would offer the following observations regarding the bill as it is currently drafted.

First, we feel strongly that the Construction Grants should not be continued through 1988 in their present form. It is recommended that the Construction Grants Program be funded only to a level adequate to complete projects already initiated under the phase-segmented provisions of the program which first received grant award on or before the end of fiscal year 1985. After those commitments are met, any remaining appropriations should be directed toward the SRFs. This is being recommended to accelerate the construction of this nation's much-needed environmental projects while, simultaneously, maximizing the efficiency and effectiveness associated with our limited financial resources. No grants should be made on new projects beginning in FY 1986.

The bill should eliminate the requirements of Title II Construction Grants as a condition precedent to the receipt of SRF funding. These Title II requirements add red tape and serve to increase the cost of the programs and cause tremendous delays. With our limited budget resources, we cannot afford these inefficiencies nor the inflationary and negative environmental impacts of delays.

The language contained in section 602(b)(5)(C) of S. 652 requires that the SRF funds "will first be used to ensure maintenance of progress and the completion of all projects needed to meet the enforceable deadlines, goals and requirements of this Act." (underlining added) This could and probably would serve to delay and overly complicate the funding of most needed projects. In lieu of this concept, a provision requiring a minimum of 60 percent of any project funded be specifically to meet enforceable requirements of the Act is recommended. We believe 60 percent would be an appropriate ratio of the total project cost to ensure that most of the cost is to meet the enforceable requirements. The percentage should be greater than 50%. To use a percentage over 75% would probably be too restrictive to be workable. To local and state agencies need some flexibility to develop projects which are responsive to their unique needs.

As an alternative to our recommendation, you may wish to consider EPA's proposal. This proposal would require that the state provide evidence that the amount of construction related to enforceable requirements would exceed the Federal capitalization of the SRF state-wide. While we believe our basic approach would be more workable, either our proposed approach or the EPA recommendation would be much more effective than the current language contained in Section 602.

Paragraphs 601(c), 602(b)(4), and Paragraphs 603(c) and (d) contain language which could prevent the SRFs from being used to guarantee loans or subsidize interest. It is believed that was not Senator Chafee's intent. Further, we see in those paragraphs certain changes which could improve the workability of the SRF system. For example, in Paragraph 601(c), funds are made available to states only during the year they are authorized. It is possible they would not actually receive appropriations until much later in the year. This could cause timing problems in trying to enter the bond market. Alternative language may say that the states must utilize their funds within 12 months following receipt. Rather than go into details in this testimony, we would be pleased to work with the Staff to resolve detail language modifications to allow these viable options to be made available to the States under the provisions of this bill.

As a further recommendation, you may wish to consider some special cases. These would be the special cases associated with the very large municipalities who have historically had needs far in excess of the State's ability to provide funding within their annual allocations. In our proposal, we chose to define large communities as those with remaining enforceable requirements in excess of $50 million. The $50 million figure seems appropriate to describe the very large projects; however, some other figure may be as appropriate. The concept is to allow the large, more sophisticated municipalities a forum in Congress to make their case for special line item budget consideration, if they so choose. Of course, if they were successful in this endeavor, we feel it only equitable to then prevent them from consuming major portions of their state's annual allocations for those projects receiving the special funding consideration.

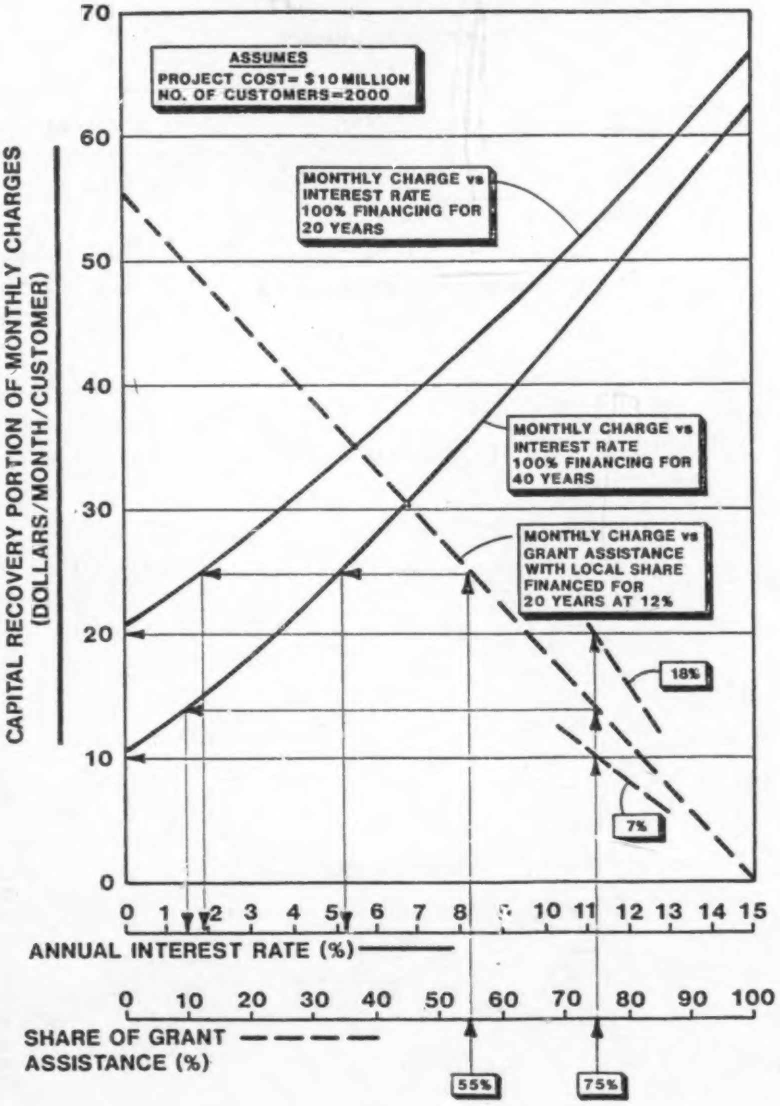
Likewise, the small communities have unique needs. EPA reports that the per capita backlog needs for small communities is double that of the larger communities. Accordingly, they also need special consideration. You may wish to offer them special access to funds such as those currently being offered through a FmHA combination grant and loan program. As with the larger communities, if they were to successfully exercise this option, the project receiving such funding would not be eligible for the SRF assistance.

SUMMARY

In summary, Mr. Chairman, we feel that the Construction Grants Transition Act of 1985 currently being considered by this Committee presents a tremendous step forward for our great nation's Federal Water Pollution Control Program. There are some important aspects which need further, careful evaluation. We offer these comments as an association of technical and professional members with extensive experience in resolving our nation's environmental problems. Our intent is to be constructive and to assist you in your deliberations regarding improvements to this much-needed program. We stand ready to answer any questions that you may have.

FIGURE I

RELATIONSHIP OF MONTHLY CAPITAL CHARGES TO CERTAIN ASSUMPTIONS REGARDING INTEREST RATES & GRANT ASSISTANCE



-APPENDIX B

A PROPOSED ALTERNATIVE

TO THE

WASTEWATER TREATMENT

CONSTRUCTION GRANTS PROGRAM

UNDER THE

CLEAN WATER ACT

SUBMITTED BY THE

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

APRIL 2, 1984

For the last decade, from 1973 through 1984, Congress has appropriated $41.3 billion to the Construction Grants Program. Most of those monies have now been obligated. However, much remains to be done. As of December 31, 1982 there were, according to the U.S. Environmental Protection Agency (EPA), 15,431 Publicly Owned Treatment Works (POTWs). By the year 2000, approximately 5,832 of that number will be in need of enlargement or upgrading. According to the same survey, by the year 2000 there will be a need for an additional 6,627 plants. If total identified needs are considered, the requirement approaches $100 billion.

The Clean Water Act has previously been modified twice delaying compliance deadlines. The EPA Administrator published a "National Municipal Strategy" on January 23, 1984 requiring that by July 1, 1988 all Publicly Owned Treatment Works (POTW's) either be in compliance with water quality standards or be on a legally enforceable compliance program to achieve compliance.

In 1977, Congress amended Section 301 of the Act to allow POTW's to delay meeting requirements of the Act, "based on the earliest date by which financial assistance will be available from the Federal Government". However, in recognition of the tremendous financial impact and the delays inherent in such a position, the 1981 Amendments to the Act made substantial changes in National policy and Federal funding levels for municipal wastewater treatment. Accordingly, the 1981 Amendments incorporated three major changes pertinent to this paper:

--Annual authorizations were substantially reduced (to $2.4 Billion/Year);

--The Federal share was reduced from 75% to 55% effective at the end of FY 84; and

--"Reserve Capacity" funding was eliminated -- providing that no grant made after October 1, 1984 shall be made to construct that portion of any treatment works providing reserve capacity in excess of existing needs on the date of approval of a Construction Grant.

These changes were designed to stretch or "leverage" the Federal funding further; i.e. -- to construct more facilities, while simultaneously reducing the fiscal impact on the Federal Treasury. While the monies spent through the Construction Grants Program since 1973 have played a major role in bringing about progress related to cleaning up our nation's waters, we believe the time has come to give serious consideration to alternative financial arrangements (other than total dependence on grants) for the construction of POTW's. We strongly believe that the options discussed below will result in a more efficient and effective use of Federal and local community dollars. More facilities will be constructed more quickly with a smaller drain on the Federal Treasury. Consequently the nation could improve its waters at a faster rate than it would with continued reliance on the Federal grants program, even with the changes noted above.

We take this position for two reasons. First, and most importantly, the very existence of a grant program actually discourages many communities from proceeding with POTW construction. It is politically unattractive for community leaders to proceed without a grant (even though they have little or no reason to believe that such a grant would be forthcoming) when their constituents see other communities receiving such grants. The procedural requirements associated with the Construction Grants Program have seriously delayed POTW construction. Experience gained through the last decade indicates that it takes eight to ten years to complete the average project within the Construction Grants Program. These delays have inflationary effects on the facilities being constructed while simultaneously deferring much needed pollution abatement projects.

OBJECTIVES

When analyzing the various alternative financial assistance mechanisms, the following objectives were considered:

-- The alternative financial assistance program should minimize inherent delays.

-- The program should provide sufficient financial assistance in time for each of the communities faced with the revised compliance date to receive funding. That is:

  -- Provide 40 to 93 billion dollars in overall project costs.

  -- Provide financial assistance by July 1, 1988.

-- Leave as much control as possible at the lowest level of government: i.e. local and state.

-- Recognize financial differences in the various size communities: large, medium and small.

-- Provide for a continuation of grant assistance for those communities which have received phase segmented funding under the Construction Grants program.

-- Focus the majority of the funding assistance on communities with "enforceable requirements" while maintaining flexibility for assistance for related pollution abatement efforts.

-- Provide the greatest level of assistance for those with the greatest financial need.

CURRENT SITUATION -- GRANTS

To understand the relative merit of the alternatives to grant funding discussed in this paper, a thorough understanding of certain characteristics of the existing grant program must be illustrated. Of particular interest are issues related to (a) eligible costs versus total project costs, (b) real costs of obtaining and financing the local share, and (c) factors affecting interest.

Though no comprehensive study data is available at this time, experience with the Construction Grants Program under the 75 percent Federal share scenario indicates that the effective grant percentage for treatment plant projects could reasonably be expected to fall in the 60 to 70 percent range of the total project costs. This percentage falls to the 55 to 65 percent range for projects which were predominantly pipeline related. This lowering of the

Federal share is caused by determinations of ineligibility for certain elements of the project costs. This situation will be exacerbated by the aforementioned revisions which have been made in the Clean Water Act. Such factors include ineligibility for Federal funding for reserve capacity, treatment levels beyond secondary that don't meet the criteria of an advanced treatment review, no funding for collection systems, and many others. Some insight into this situation can be gained from a review of the Needs Survey results. EPA has determined that approximately $35 billion is needed to meet the "enforceable requirements" of the Act, while the Needs Survey documents an overall requirement of over $90 billion. This overall requirement could be reduced to $57 billion by eliminating the Combined Sewer Overflow costs; however, this is still approximately 160 percent of the costs related to the "enforceable requirements". Accordingly it appears reasonable to assume that, in the 55 percent grant scenario, the actual level of Federal participation of overall project costs may range from 30 to 45 percent.

The actual cost of obtaining the "local share" is also quite significant. Assuming a community has $10 million in eligible project costs, they may expect to receive $5.5 million in Federal aid. Few municipalities have the financial resources to produce the local share without borrowing the money. This problem is exacerbated by the fact that the current program provides only for reimbursement grants. This means that a community must incur and frequently pay for all project costs prior to submitting requests to EPA for reimbursement. At best, they can expect to receive reimbursement forty-five to sixty days from the date of request. However, the actual delays are often double that period. Accordingly, the vast majority of the municipalities turn to some form of municipal bond financing to obtain the local share. Usually the amount of money financed in the bond issue is significantly greater than the $4.5 million figure which may seem appropriate for the example cited above. The costs of developing and marketing the bond issue usually adds another 5 to 7 percent to the local share. In addition, to obtain better bond ratings (and therefore lower interest rates), they may choose to capitalize other funding requirements such as: renewal and replacement funds, sinking funds, reserve accounts, or insurance costs. Further, to obtain reasonable interest rates on the new bond issues, these communities may find it prudent to refinance any outstanding bond issues which pledge a portion of the revenue stream contemplated for repayment of the new debt. These actions may cause an increase in previously existing bond interest rates of 2 to 7 percent. When the above factors are taken into consideration, these "costs" could easily increase the local share by 10-20 percent; without considering the interest cost.

A discussion of the factors that affect interest rates is pertinent at this point. The interest rate charged for a particular bond issue can generally be described as the sum of three factors: (a) the investor's perception of the effect of inflation for the duration of the investment contemplated, (b) the investor's perception of the risk associated with the community's ability to repay the debt, plus the perceived risk related to the inflation projection identified in (a) and, (c) a potential return on the investor's investment. To illustrate the above discussions, refer back to the $10 million dollar example:

	Costs ($ million)
-- Eligible portion of Project	$10.0*
Federal Share	(5.5)
Local Share	$ 4.5
-- Financing Costs (@20%)**	0.9
-- Bond Issue	$ 5.4

Assuming level debt service (principal and interest) for a period of 30 years at 10 to 12% interest, the annual payments would be approximately $550,000 to $650,000. Accordingly, over the 30 year period, the community would pay something between $16,500,000 to $19,500,000 in principal and interest. Deducting the amount of the bond issue indicates that between $11 to $15 million is paid in interest alone. It is interesting to note that this amount is between two and three times the amount of the bond issue and greater than the total eligible portion of the project (including the grant amount).

ALTERNATIVES CONSIDERED

Previous analyses have indicated that low interest loans, covering 100 percent of project costs, can be implemented such that the impact on the rate payers in a community would be equal to or lower than those with grants. In addition, we strongly feel that the loan program obviates the two major problems associated with the grant program discussed previously. A loan program, wherein the community would be responsible for repaying the entire principal amount plus some portion of the interest, should be implemented with minimal regulatory intervention and oversight related to the technial aspects of the program, as well as providing financial incentive for more prudent technical and financial decision making on the part of the local community.

Three primary types of loans were considered:

- A federally-funded "loan bank" concept, wherein the Federal government provides the seed money for low interest loans.
- A system whereby the Federal government would "subsidize" the interest portion of a loan obtained in the private sector.
- A system whereby the Federal government "guaranteed" loans made to municipalities by the private sector; thereby reducing risks and obtaining improved interest rates.

The revolving "loan bank" concept would have the effect of recirculating the money, making it available for potential future borrowers. However, because payment periods usually range from 20 to 40 years, the "recycled money" would be available in small quantities and would be further diluted by the effects of inflation. Accordingly, after the initial seed money was distributed, the program would be of little significant effect. In addition, as all of the project costs would be borrowed from the bank, a Federal commitment of $2 to

---

* As noted above, total project cost would probably be far greater than this amount.

** Assumes capitalized reserve account

$4 billion annually would only result in construction of $2 to $4 billion of project costs without some state funded cost sharing. Accordingly, this alternative would not meet one of the objectives as outlined above; it would not provide a viable financing program for the construction of between $40 and $93 billion within the next five to eight years.

With the "loan subsidy" concept all of the above objectives would be met; however, Congress would be committed to annual cash outlays for the next 20 to 40 years. Assuming the total amount of loans subsidized was $60 billion and the average interest rate paid by the POTW's was in the range of 10 - 12 percent, with a loan percentage objective of 5 percent, the Federal subsidy would be 7 percent. This means that the Federal government's financial obligation would be between $3.0 and $4.2 billion in the first year, steadily decreasing to zero in a 20 to 40 year period. We feel that this alternative would obligate the Federal government to a present worth commitment greater than would be politically achievable.

The "loan guarantee" concept holds much promise, particularly when reinforced with a small interest subsidy. Assuming the program could be implemented such that the guarantee provision would not be abused, the Federal government's liability would then be confined to stepping in and assisting communities when unforeseen circumstances affected their ability to pay. By reducing the risk to the bond holders (both with respect to ability to repay and effects of inflation), the private sector could provide the financial resources at lower than market interest rates. It is believed that having the Federal loan guarantee, in conjunction with municipal tax-free bonds, average interest rates could be brought down to 6 to 9 percent or lower. Further enhancements to the system could then be implemented to bring the interest rates down to a 5 percent level with reasonable financial obligations on the part of the Federal government. These enhancements would include adjustable-rate financing and a small interest subsidy. This concept meets the objectives set forth above.

RECOMMENDED ALTERNATIVE

We recommend consideration of an alternative which consists of: (a) loan guarantees, (b) adjustable rate bonds, and (c) interest subsidy (when the annualized interest rate exceeds 5 percent).

A loan assistance program would be offered to a unit of local government upon affirmative determination that they met the following criteria:

- State certification that at least 60 percent of the total project costs to be funded under the program relate to meeting the current "enforceable requirements" pursuant to the Act.
- State certification that the project, when completed, would be in compliance with State and Federal water quality standards.
- Determination by the appropriate Federal agency that the unit of local government had submitted a suitable Financial Plan demonstrating that it had identified a revenue source of sufficient magnitude to repay its obligations under the bond issue.

Upon meeting the above criteria, the Federal government would issue a certificate committing to guarantee the debt repayment. If a default were to occur, the Federal government would provide all or a part of a payment to the extent necessary to meet the bond payment obligations. If the Federal government had to step in under this scenario, it would have the right to recover from the unit of local government in subsequent years.

Basically the bonds would be issued to the private sector as short-term variable rate obligations. Debt retirement would include interest plus an annual principal payment of at least 2 percent of the original amount of the bond issue. In no case would the Federal guarantee extend beyond 30 years from the date of the original bond sale for that particular project.

If in any term, the annual interest rate for the bonds was above 5 percent, the Federal government would make payment to the unit of local government in the amount of the difference between the actual interest rate charged by the bond market and the 5 percent interest goal.

As part of the Financial Plan approval, the municipality would be required to develop a system of rates to generate revenues sufficient to repay its obligations under the loan, plus cover the costs of operation, maintenance and equipment replacement costs.

The current Construction Grants Program would be continued until all projects involving phase segmented funding during or before fiscal year 1985 are completed. Beginning in fiscal year 1986, Congress would provide that no new projects receiving Construction Grants Program funding would be initiated except as set forth below.

Large systems, involving projects wherein over $50 million is needed specifically to meet "enforceable requirements" under the Act, would be considered for some grant participation annually by Congress on a line-item budget basis. Communities of less than 10,000 people as of 1984, would be eligible for combination grant and loan assistance under the existing FmHA program. Any community which elects to receive funds through either of these sources after 1986 would not be eligible for funding under the loan program described above.

No new projects would be eligible to initiate construction under the loan program described above after the end of fiscal year 1990.

Approved by:

Construction Grants Committee, Professional
Engineers in Private Practice, March 29, 1984

Legislative and Government Affairs Committee,
National Society of Professional Engineers,
April 2, 1984

ACEC File #701.01

American Consulting Engineers Council
1015 Fifteenth Street, N.W., Washington, D.C. 20005 202-347-7474
Telex: 897445 AMCONENGRC WSH

April 26, 1985

Honorable John Chafee
Chairman, Subcommittee on
Environmental Pollution
Committee on Environmental & Public Works
406 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Chafee:

The American Consulting Engineers Council (ACEC) has worked with the National Society of Professional Engineers (NSPE) for several years on developing methods for alternative financing of wastewater treatment systems. To accelerate the compliance of treatment systems to meet clean water goals and provide the capital at a reasonable interest rate necessary to build them, ACEC and NSPE agreed that the federal clean water program should harness the private bond market to create the capital, not attempt to provide the capital itself through grants.

We therefore endorse the testimony of NSPE presented to the Subcommittee and have submitted a separate writtent statement for the hearing record.

ACEC believes that the elements of appropriate transition from grants to interest subsidy are present in S652. With the modifications necessary to create a long term program in the states, S652 can meet the long term objectives of continuing the clean water financing progam, phasing out direct federal grants and meeting the objectives of deficit reduction.

We appreciate the opportunity to present our views to the Subcommittee.

Sincerely,

Laurence D Bory

Laurence D. Bory
Director
Governmental Affairs

LDB/jq

bcc: Kermit Prime, Boyle Engr.
NSPE

President: CLIFFORD E. EVANSON, Glencoe, Illinois. *Senior Vice President:* PAUL C. BUCKNAM, JR., Wellesley, Massachusetts. *Vice Presidents:* EDWARD W. DAVIDSON, JR., Atlanta, Georgia. CHRISTOPHER MARX, New Haven, Connecticut. JAMES E. (BUD) MOULDER, St. Louis, Missouri. ROBERT J. SMITH, Seattle, Washington. RICHARD L. WILLIAMS, Roanoke, Virginia. *Treasurer:* LESTER H. SMITH, JR., Nashville, Tennessee. *President-Elect:* ARNOLD L. WINDMAN, New York, New York. *Executive Vice President:* LARRY N. SPILLER

NATIONAL UTILITY CONTRACTORS ASSOCIATION
(NUCA)

Represented by

Loretta Simmons, President
Blair Supply Corporation
President, National Utility Contractors Association

and

Gerard Kenny
Kenny Construction Company
Chairman, NUCA Government Relations Committee

CLEAN WATER ACT

Senate Subcommittee on Environmental Pollution
Senator John Chafee, Chairman

March 27, 1985

The National Utility Contractors Association
Suite 606, 1235 Jefferson Davis Highway
Arlington, Virginia 22205

Loretta Simmons
President, Blair Supply Corporation

Representing the
National Utility Contractors Association

Introduction

Mr. Chairman and members of the Committee, the National Utility Contractors Association (NUCA) is comprised of 2,000 companies nationwide -- contractors, suppliers and manufacturers -- that specialize in water delivery and wastewater treatment construction projects, particularly underground pipeline work. NUCA members lay the pipe and build the treatment plants necessary to achieve the goals set forth by Congress in the Federal Water Pollution Control Act. In short, it is our job to build the projects necessary to meet the "clean water" requirements mandated by Congress.

As a result of our work in building many of the wastewater treatment facilities funded as a result of the federal statute now before this Committee, we wish to take this opportunity to offer the utility construction industry's views on the program and to offer our recommendations on possible improvements to the Act.

In recent years, NUCA and other organizations have mounted public education campaigns designed to draw attention to the nation's decaying infrastructure. Partly as a result of the publicity that has been focused on the nation's decaying infrastructure related problems in recent months, many people are beginning to realize the decaying condition of our water delivery and wastewater treatment systems, and our highways and bridges. The even more crucial problem, however, has not been adequately addressed: how does the nation pay to repair and rehabilitate this network of public services? At this time we will address the specific issues we feel are most critical in the clean water debate.

Reauthorization

As you know, legislation adopted by Congress in 1981 extends the sewage treatment construction program only through fiscal 1985. It was only through the tireless efforts of Chairmen Stafford and Chafee, and Members of this subcommittee that an extension was achieved. President Reagan has made it clear he intends to rapidly phaseout the program as part of the Administration's budget reduction plan.

Most importantly, we feel that continued federal funding for the EPA construction grants program is essential. The four-year phaseout proposed by the Administration in the Office of Management and Budget's (OMB's) plan is simply much to rapid. This proposed timetable fails to give state and municipal governments, which will be expected to assume complete responsibility for construction financing by 1990, adequate time to adjust to such a rapid phaseout of federal dollars.

The Chafee proposal, however, may be too lengthy in its scope, in our opinion. While supportive of a multi-year reauthorization of the program, we feel the nine-year phaseout proposed in S. 652 should be amended for the simple reason it is impossible to predict what the future holds for the quality of our nation's waters, financing available to construct needed facilities and other major factors. We respectfully urge the Congress to adopt a three- to five-year reauthorization plan that does not specify a phaseout of the program. Toward the end of the new reauthorization period, Congress will have an opportunity to again study the program and the nation's clean water needs at that time. Sufficient progress may then have been made and adequate funding may then be available under State revolving loan funds to adopt a rapid phaseout strategy. Environmental and economic conditions at the time may still necessitate an increased financial commitment by the federal government. In summary, NUCA favors a shorter-term reauthorization than that proposed in S. 652, and one that does not specify a phaseout of federal funding for the program.

Funding Level

NUCA strongly supports an increase of $500 million to $1 million above the current $2.4 billion in yearly authorizations for the program. We want to say at the outset that as utility contractors we hope our industry would benefit from this increased funding through the competitive bidding system. But it is obvious from a number of studies that the current $2.4 billion annual appropriation for the program is inadequate to meet current or projected needs. We also firmly believe more of the funding burden must be assumed by state and local governments.

The problems confronting this nation's sewage treatment systems are acute, they are immediate and they are widespread across the nation. In the Boston area, much of the sewer system has been in operation for more than a century. Antiquated wooden pipes still transport part of the city's waste, and authorities estimate the region loses 30 percent of its wastewater through aged, leaking pipes. Orlando, Florida is prohibited from adding more homes to its already overloaded sewer system. One-third of all sewer lines in Albuquerque, New Mexico are so deteriorated that trucks traveling over them cause the pipelines and the highways above them to collapse. This dilemma facing our nation is the result of long-term, massive underinvestment in wastewater treatment systems, largely on the part of state and local governments.

All told, the EPA estimates it will cost some $108 billion by the year 2000 in order for the nation's wastewater treatment systems to comply with current environmental requirements -- $85 billion alone for the current population. Under current law, the projected federal share of those costs has been reduced to roughly $35 billion. While we are aware of the perhaps somewhat inflated projections contained in the EPA survey, there is little doubt the financial requirements for the remainder of this century are immense.

We also wish to bring to your attention the April, 1983 report by the Congressional Budget Office (CBO) entitled, "Public Works Infrastructure: Policy Considerations for the 1980s." The report from this highly respected body states, "Inadequate sewer pipes and sewage treatment as well as insufficient capacity to handle storm runoff characterize many of the nation's 15,000 wastewater treatment systems...but projected federal and non-federal outlays combined fall short of (projected needs) by about 24 percent."

The CBO report also indicates EPA and other federal agencies, under the appropriations ceilings now authorized, will spend an average of $3.2 billion on wastewater facilities each year between now and 1990. In order to meet all estimated needs, the CBO indicates federal spending would have to increase to an average of $4.2 billion each year through 1990 -- roughly a 25 percent increase.

Additional statistics also support the need for increased funding for the construction grants program:

- The current backlog (total existing needs) for compliance with the Act is estimated at $85 billion, according to EPA;

- Billions in wastewater treatment projects ready for construction currently await funding;

- According to Pat Choate, co-author of "America in Ruins," it will cost $25 billion over the next few years alone to meet pollution control standards;

- Nearly one-half of the nation's communities are unable to add additional homes and businesses onto their sewage treatment systems because those systems are already operating at full capacity -- thereby losing valuable tax revenues.

It is this last statistic that is particularly alarming. A sound network of basic public facilities is essential to the future economic growth of our nation. Studies indicate businesses and industries place the condition of an area's sewer and water system near the top of their list of criteria in determining whether to build, expand or relocate.

Perhaps the most convincing argument in favor of increased funding is to consider the financial risks involved in continuing with inadequate current funding levels ($2.4 billion annually). A mere reduction in funding from pre-1982 levels did not reduce the overall cost of our clean water needs. If anything, it has contributed to delays in construction which, in turn, will add to the total cost of the program.

We feel an annual authorization above $2.4 billion annually represents a more effective approach to the Construction Grants program. Low annual expenditures postpone the nation's clean water problems and thus prolong the very need for the federal program. Studies indicate that between 1976 and 1984, construction costs in this nation increased by 65 percent. Thus, the reduced annual appropriation for the program can be compared to running in place -- we are barely keeping up with funding needs without making a real dent in the problem.

Again, we stress that State and local governments must also increase their financial commitment for water pollution control construction projects. This should be accomplished through a tough EPA enforcement policy requiring municipalities to develop a firm construction schedule to meet the water quality standards required by the federal Clean Water Act.

Budgetary Considerations

Chairman Chafee, your ongoing commitment to a strong water pollution control effort in this nation is unquestioned. Few other Members of Congress have displayed either your keen understanding of the nation's environmental needs or your tireless involvement in working for solutions to our complex pollution problems. Your job is made much more difficult as a result of the current state of the federal budget and the need to appropriate funding for critical federal programs.

Our recommendation to increase yearly funding, as we stated earlier in this presentation, is due largely to our firm belief in the critical link between adequate wastewater treatment facilities and future economic growth. It is also a result of the apparently imminent reductions in federal funding for other programs used by state and local governments to finance sewage treatment construction projects.

The Administration is proposing to reduce or terminate federal funding for the revenue sharing program, HUD Community Development Block Grants, Economic Development Administration, Farmers Home Administration Water and Waste Disposal Program and others. Each of these programs is used by state and municipal governments to finance wastewater treatment projects and any reduction in their funding will only further curtail progress in water pollution cleanup efforts. Regardless, it appears likely at least some cutbacks in these related programs are inevitable.

Obviously, we are open to criticism for advocating an increase in spending for any federal program. As responsible members of the business community, we remain staunchly supportive of a balanced federal budget. However, it is clear the only substantive reductions that will significantly achieve that goal would be those in defense and entitlement programs.

It is crucial to realize that federal funding for water pollution control programs has decreased more than 40 percent since fiscal 1980. That percentage will increase if the Administration's fiscal 1986 budget requests are approved. During that same period, federal spending for defense and entitlement programs has skyrocketed. Defense spending alone will have risen more than 55% to a staggering $313 billion in the President's fiscal '86 budget. Given the link between sound sewage treatment systems and future economic growth, we feel strongly that these programs have already done their share in limiting federal spending and, as a result, we feel justified in advocating an increase in federal funding to a total in the range of $2.9 - $3.4 billion yearly.

State Revolving Funds

As an early staunch advocate of the establishment of State Revolving Funds, NUCA enthusiastically supports Section 4 of S. 652, which gives any State the option of using its Title II grant to capitalize its revolving fund for wastewater treatment construction.

In light of the immense price tag placed on meeting the nation's water quality goals, nearly every group and individual familiar with the problem -- contractors, environmentalists, engineers, manufacturers and municipal officials -- agree on one point: the need to develop alternative means of funding wastewater treatment systems, other than the federal construction grants program, is imperative. NUCA has studied a variety of proposals and concluded that the most effective mechanism would be state revolving fund programs.

Under this concept, capital funds would be deposited in special state loan accounts and no- or low-interest loans would be awarded to eligible municipalities for the construction or repair of roads, bridges, water and wastewater treatment systems. Funds repaid to the program by these municipal governments, as well as any interest earned, would represent a source of capital for these and additional projects. Thus, loan repayments will maintain the equity capital of the loan program and provide it with a source of funds for subsequent loans.

States maintain a priority list of thousands of wastewater treatment projects waiting to receive an EPA construction grant. Under the current grant program, only a small handful will receive funding while the remaining localities must either finance projects on their own or, more likely, postpone construction in hopes of receiving a federal grant at some future time. A low-interest loan from a State loan program would provide those municipal governments with an affordable source of financing and enable many more projects to go to construction.

One potential problem we see in Section 4 is its failure to dedicate projected repaid wastewater treatment loan monies for additional sewage treatment projects. As the proposal is now worded, loans made by the bank that make use of federal EPA construction grant money must be earmarked for wastewater treatment construction. However, repayments of those loans -- to be used as second and third generation loans -- could be used for other projects unrelated to water quality improvement. In short, we feel the Congress should permit States to use their EPA grants in a loan program, but it should include language requiring that those waste water loan repayments be dedicated toward additional sewage treatment projects.

There is no doubt that the use of EPA grant money as loans could likely result in an increase in user fees paid by businesses and households. However, Mr. Chairman, NUCA feels there is a crucial need for owners of American homes and businesses to pay increased rates for wastewater treatment services. The people of this nation have grown accustomed to paying artifically low user fees for sewage disposal services. Nationwide, a survey of 66 cities showed that the average family paid less than 50 cents per day for collection and treatment of their wastewater. It is this practice that is largely responsible for the decaying condition of many of our municipal sewer systems. The low rates determined by local authorities are hardly adequate to pay only for the cost of treatment plant or pipeline construction; they do not provide the funding necessary to operate and maintain the system in future years. Wastewater treatment and disposal is a vital, yet costly, public service and the American consumer must realize the true cost of that service.

In supporting Section 4 of S. 652, we feel that this proposal should not require States to use their EPA grant as loans, but merely permit those interested states to use all, part or none of their grant money as loans for wastewater treatment construction projects beginning in fiscal 1986.

Our industry also supports the Chafee proposal requiring States to contribute a share equal to 15 percent of its federal grant for inclusion in its revolving loan funds. This requirement will compel States to more responsibly oversee the fund and increase their accountability to ensure the loan money is used to finance only truly necessary construction work.

Collectors, Rehabilitation/Combined Sewer Overflow Correction

Mr. Chairman and Members of the Committee, we wish to take this opportunity to stress the importance of three categories of wastewater treatment construction for which Congress limited eligibility for federal funding in the 1981 amendments. As you will recall, direct federal financing for the sewer rehabilitation, collector pipeline construction and combined sewer overflow correction is now restricted to each Governor's "20 percent set-aside discretionary fund."

NUCA and other groups strongly disagreed with the decision to so limit funding for these categories because we feel funding for their construction will be curtailed. Until statistics are available to accurately gauge the impact of this change on these areas of construction, we urge you to a.) make no further reductions in the 20% Governor's set aside, and b.) amend Section 602 by permitting States to use revolving fund monies for all categories of construction.

In many regions of the nation, particularly, but not limited to, the older urban areas of the Northeast and Midwest, the major problem in meeting local water pollution needs lies not in additional wastewater treatment plant construction, but in overhauling and upgrading their sewer pipeline systems.

Rehabilitation and repair is crucial in correcting leakage in these systems. In 1980, EPA estimated that infiltration /inflow constituted 25% of total existing flow to the nation's treatment plants. As a result, plants were treating as much as one-third more water flow than necessary.

Combined sewer overflow (CSO) correction remains a critical and costly problem in many areas. Some cities with a significant combined sewer system -- single pipelines transmitting both sewage and rainwater runoff (collected via street drains) -- contribute a large share of the pollutants in their waterways to CSO overflows.

There is no doubt that the construction of collector sewer systems is a crucial element in this nation's clean water effort. Wastewater treatment systems are just that: systems. The efficiency of a system is dependent upon each of its parts. Sound collector pipelines alone are inadequate if the treatment plant is obsolete and, conversely, a sophisticated treatment plant does little good if the pipelines carrying wastewater to it are aged, leaking and corroded. Significantly, 50% of the 1,400 city governments that participated in a National League of Cities survey said their wastewater collection systems need major repair.

Currently, approximately 60 million Americans are without sewer service. The alternative is largely the use of septic tanks. When operated and maintained properly by owners living on suitable soil, septic tanks can provide a cheap and efficient method of waste disposal. However, studies indicate that at any one time, 20 to 60 percent of the septic tanks in the United States are malfunctioning. More importantly, malfunctioning tanks are a major source of both groundwater and surface water pollution.

The recent EPA Needs Survey projects a need for collector sewers by the year 2000 costing some $23 billion. If forced to bear the burden of financing collector construction, communities of all sizes would be hard-hit. Municipalities with a population of 25,000 or less would be particularly affected because, due to a lower population density, collectors constitute nearly 80 percent of the total project cost. Eliminating collector sewer eligibility represents a "big city" bias in the program by unfairly penalizing smaller communities.

Mr. Chairman and Members of the Committee, as utility contractors who replace existing sewer pipelines on a daily basis, we have a unique first-hand knowledge of the condition of these collector lines. Often, they have been in use for nearly a century. Many are constructed of outdated materials such as wood or brick. They are cracked, broken and corroded beyond repair due not to faulty materials, but due simply to age, overuse and neglect. Our position can best be stated by citing a recent survey which found that from half to as much as 90 percent of the flow in some urban collection systems is ground and surface water as a result of infiltration-inflow. We contend that replacing or repairing collector sewers would result in more efficient and less costly operation of existing treatment plants as well as the construction of more efficient new plants in the future.

Strict safeguards now contained in the EPA program prohibit funding for the future population. However, the replacement of existing collector pipeline systems remains a vital part of the water pollution abatement effort. While every effort must be made to preserve funding dollars through the repair and rehabilitation of these pipelines, the fact remains many collector systems are beyond repair and their failure to adequately convey sewage to treatment plants remains a public health hazard. In these instances, States should be given the flexibility to finance truly necessary collector construction free of federal limitations.

In supporting "full" eligibility for collector pipeline construction under State loan programs, we want to stress that collectors represent more than just growth. NUCA members are among the first to admit that some municipalities used EPA grant funds to build unnecessary collector lines to encourage growth in residential areas.

In addition, Mr. Chairman, we strongly urge the Committee to amend Section 602 (b) (5) of S. 652 to give States the flexibility to use funds loaned through their revolving funds for all categories of construction under the Clean Water Act for the reasons listed above. Each area's needs are unique and a State with a need to increase funding for collector pipeline projects should be permitted to loan the money for that purpose -- unrestricted of the 20 percent set-aside limitation.

In short, we urge you to grant States maximum flexibility in the categories of construction eligible for financing through their revolving loan funds. Unless adequate funding is provided for these three categories of construction -- particularly collector pipelines -- the Nation's battle against water pollution is being fought with a half-empty arsenal.

We strongly support provisions of S. 652 that permit States to use Title II grants to capitalize their revolving loan funds to finance wastewater treatment construction. NUCA urges you, however, to make the following changes: 1.) specify that loan repayments to the State funds can be used solely for similar sewage treatment projects, and 2.) grant States the flexibility to use their State Revolving Fund loans for all categories of wastewater treatment construction.

Summary

This nation has made significant progress in its effort to clean our waters, yet the job is only partially complete. To those who may be critical of the costs involved and their impact on the federal budget, we offer this analysis: a reduction in the federal budget is partially dependent upon economic growth, and economic expansion is dependent upon a sound infrastructure. Inadequate sewage treatment is a major obstacle to both a clean environment and to economic development, and it is a crucial element in the nation's economic recovery. As the utility contractors of this nation, we stand ready and able to contribute to the twin goals inherent in this EPA program: environmental quality and economic growth.

Joining me to answer any questions members of the panel may have is Mr. Gerard Kenny of Kenny Construction Company in Chicago, Chairman of NUCA's Government Relations Committee. Thank you for your kind attention.

AMENDING THE CLEAN WATER ACT

THURSDAY, MARCH 28, 1985

U.S. Senate,
Committee on Environment and Public Works,
Subcommittee on Environmental Pollution,
Washington, D.C.

The subcommittee met at 9:30 a.m., in room SD-406, Dirksen Senate Office Building, Hon. John Chafee, chairman of the subcommittee, presiding.

Present: Senators Chafee, Simpson, Simms, Hart, and Mitchell.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator **Chafee**. I want to welcome everyone here this morning. This is the third day of hearings on amending the Clean Water Act, and we have had a series of fine panels testifying. Yesterday we heard from the cities, States, financial experts, and others on the Construction Grants Program.

This morning, we are first going to hear from Senator Mattingly. Then we are going to have several panels of witnesses to discuss various aspects of the Clean Water Program.

There will be fundamentally different factors considered here today, such as nonconventional pollutants, the length of discharge permits, antibacksliding, nonpoint source pollution and estuaries.

Later in the day, Senator Evans and Senator Gorton from Washington will be here to testify.

For the last 2 days, we have spent a lot of time discussing the future of the Construction Grants Program. Let's review the bidding. The administration has proposed that the Clean Water Program continue to be funded at $2.4 billion for 1 more year, and then start a phaseout of the Construction Grants Program at a reduction rate of $600 million per year, which would last for 3 years. And then the Construction Grants Program ends, in 1989. In other words, the administration has proposed spending a total of $6 billion over 4 years.

The bill which I have introduced with Senators Stafford, Bentsen, and Mitchell authorizes not $6 billion but $18 billion, and not over 4 years but over 9 years.

In other words, what we have proposed here is spending three times as much as the administration requests and having it last twice as long as the administration requests. The administration is seeking to end this program. Nonetheless, we put in the greater figure, the $18 billion, and had it last longer, for 9 years, in order to meet the commitment that I made when we reauthorized this program in 1981.

At that time I said we would continue it at $2.4 billion for 10 years. I made that commitment and we are going to meet it, as far as I am concerned. Not only to continue it for this length of time with the $2.4 billion continuing, but we have added additional moneys as I mentioned earlier.

Some have said they want more money for the program. Frankly, I would like more money, too. But it seems to me we have got to bear in mind that there are other players in this drama other than the U.S. Senate or the Congress.

One key player is the President of the United States, who only wants $6 billion and wants the program ended in 4 years. Those who are asking for increased funding above what we are asking, which as I mentioned before, is three times what the President asked, have to keep in mind that the President could veto this bill. Then we would end up with nothing.

Indeed, he has challenged us to "Make his day." If he is successful, then we will have a great publicity furor, but no program.

The object that we have is to obtain a Clean Water Program. Our goal is not to create a shootout with the President in which we get shot.

We have to consider several other components in the program. In this program that we have submitted, we eliminate the loophole in the law which allows waivers for those who discharge toxic nonconventional pollutants. Those waivers threaten to stymie the progress we are beginning to make with respect to the cleanup of toxics in our rivers and lakes.

The bill also creates a National Estuary Program, where estuaries, such as Narragansett Bay and others, can receive special research and planning assistance from the Federal Government.

The bill, S. 53, which is the companion bill, has been introduced by the distinguished chairman of this committee, Senator Bob Stafford. We will consider it at the same time. That deals with permits and other matters including the Nonpoint Source Pollution Program, a program that is long overdue.

That bill also stiffens civil and criminal penalties for polluters and creates a program where we continue the clean up of toxic pollutants well beyond the stringent standards that have been set. These are laudable goals and will strengthen the Clean Water Act.

We have a long pull ahead of us. We are going to pass a Clean Water Act this year. If we are going to do it, it has to be reauthorized by September 30. We have got to move quickly and aggressively.

It is my intention to hold a markup next Thursday on this bill in this subcommittee and move it up to the full committee, who, hopefully will report it out quickly.

We need that legislation to continue the progress that we have made in cleaning up the waters of the United States. We are going to act quickly. It is my hope that we can have the bill passed in the Senate sometime in May of this year.

We welcome the distinguished Senator from Georgia, Senator Mack Mattingly, who has created an excellent record in the 5 years he has been here in the Senate.

Senator, we welcome you.

STATEMENT OF HON. MACK MATTINGLY, U.S. SENATOR FROM THE STATE OF GEORGIA

Senator **Mattingly**. Thank you, Mr. Chairman. I want to thank you for this opportunity to appear briefly before you this morning on very, very short notice.

I just want to express some suggestions that I have for what I believe are some constructive and positive efforts in the current attempt to renew and revitalize the Clean Water Act and try to promote and encourage a continuation of the Senate/Federal partnership which has made encouraging strides in improving the quality of the nation's air and water resources.

I think you are to be commended. I think our country and everybody is to be commended on the progress they have made this last decade in dealing with a fairly monumental problem in this area.

I applaud your efforts, especially when you referred to the administration shootout that may happen and hopefully with these expedited hearings that you are having and the upcoming markups that will all be resolved.

I have a statement that I want to submit for the record, and Mr. Chairman, I want to submit for consideration by your subcommittee, several amendments to S. 53 and S. 652, which I believe will help advance and really expedite our mutual quest for a vastly improved environment and which will allow our local States and government partners a greater degree of flexibility and authority, really, to deal with the problems which may be requiring differing solutions in different circumstances.

I think the suggestions, some of which are technical in nature, have been developed by many people, not only through our office, but people that are recognized leaders in the environmental community and through the Association of State and Interstate Water Pollution Control Administrators.

Mr. Leonard Ledbetter from my State I believe testified before your committee.

Senator **Chafee**. He testified yesterday morning.

Senator **Mattingly**. Part of these suggestions are his, part are from our office. I think they will be helpful to you. I think if your subcommittee sees possible, I think they will even help us keep within the fiscal restraints that you have set forth.

So I am just here to help you prevent that shootout that could happen, which knowing the process that we are going through this year and knowing your leadership ability, I think that you will probably end up avoiding the shootout and we will have a continued progress in the clean air and clean water.

Mr. Chairman, I would just like to ask that the several amendments that I have submitted to you, also be printed in your record for your use.

Senator **Chafee**. Yes, that is fine, Senator. Your full statement plus those suggested amendments and revisions will go in the record, and we will certainly take those into consideration.

Senator **Mattingly**. Thank you very much, Mr. Chairman.

Senator **Chafee**. Thank you for coming by and we appreciate the time you gave.

All right. Now, we will go to our first panel in which we have Ms. Frances Dubrowski, senior attorney with the Natural Resources Defense Counsel; Mr. Charles Malloch of Monsanto; and Mr. James Gillett of Cornell University.

So why don't you start off, Ms. Dubrowski.

STATEMENT OF FRANCES DUBROWSKI, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

Ms. **Dubrowski**. Thank you, Mr. Chairman.

Senator **Chafee**. It is nice to have you here again.

Ms. **Dubrowski**. It is nice to be back again, Senator.

Before I summarize my prepared testimony, I would like to address two provisions in the administration's bill that are not covered in the prepared testimony.

Those provisions, if enacted, would be a major step back in the National Water Pollution Control Program. They would place serious obstacles in the path of citizen suits to enforce the law and would take the Federal enforcement process behind closed doors.

One is the provision in section 27 of the administration's bill, which states that no judgment in a citizen suit can be binding against the United States. If enacted, this provision would be a disincentive to settle many citizen suits. There is no reason for this provision; the Federal Government has months of notice of each citizen suit before the suit is settled, so the Government has ample time to intervene should it desire to do so.

The second provision is the administrative civil penalty provision, which would set a cap on penalties below that available in a court and would preclude citizens, once an administrative civil penalty proceeding was pending, from filing any enforcement suit for the same violations, no matter how lackadaisical EPA was in pursuing the administrative proceeding.

In addition, citizens would have no right to notice of the administrative proceeding; no right to ask for a hearing; no opportunity to participate, unless the Administrator, in his discretion, granted that opportunity; and no right to judicial review.

Senator **Chafee**. Neither of those provisions are in our bill?

Ms. **Dubrowski**. Neither of those provisions are in your bill.

Senator **Chafee**. So, you approve of our bill on that score?

Ms. **Dubrowski**. Well——

Senator **Chafee**. Go ahead, say it.

Ms. **Dubrowski**. We think your bill is dramatically better and does not take this serious step backward. But S. 53 does.

Senator **Chafee**. Thank you very much. Next witness please.

Ms. **Dubrowski**. S. 53 does contain administrative civil penalty provisions. Those provisions ought to be rethought in view of the direction that EPA seems to be moving with administrative penalties. It would be a tragic mistake if the administrative civil penalty proceedings cut off citizen suits which have represented about 20 percent of the enforcement suits brought in Federal court under the Clean Water Act.

Having said that, let me turn to the subject of this panel: Variances. Since this committee last considered the Clean Water Act, there has been a close, 5 to 4 decision of the U.S. Supreme Court.

That decision allows EPA to grant case-by-case variances from uniform national pretreatment standards for toxics. By analogy, the decision would also apply to BAT standards for toxics.

We think that Congress, when it enacted this law in 1977, tried to eliminate variances for toxics. 301(l) of the act says the Administrator may not modify the requirements of section 301—that is, the BAT pretreatment standards—for toxics.

Senator Muskie said there are no variances or waivers for toxics. The Senate report said the same thing.

This was a very controversial decision of the Supreme Court. The majority found both the word "modify" and the legislative history on the House side ambiguous. The dissent by Justices Marshall, O'Connor, Blackmun, and Stevens found section 301(l) perfectly clear and criticized the Court for "validat(ing) outcomes substantially less protective of the environment" than Congress intended.

Whatever can be said about 301(l), the Court did not reach the policy question of whether FDF variances are useful or appropriate. We submit that they are not.

FDF variances lead to weaker standards than subcategorization during rule making because variances consider each source in isolation, without regard to the question of whether other similarly situated sources can do a better job for controlling toxics.

FDF variances also reduce demand for new technology. We have dramatic evidence of that. General Motors filed 27 FDF variance applications. When the third circuit struck down the variance, these plants were 9 months away from a compliance deadline.

Using a variety of pollution control devices, GM brought 19 of those plants, according to its records, into compliance by the deadline. The remaining 8 plants signed consent decrees. With the FDF variance, GM would not have had the same incentive to move for timely compliance.

I should also point out that EPA's track record processing FDF variances in the BPT context is dismal; 40 percent of the pending variance applications predate 1980. Some go back to 1976 and 1977. EPA has proven that it cannot resolve these questions quickly. Consequently, the variances are unfair to the great bulk of sources in an industrial category who come into compliance in a timely fashion.

I have one final point on the FDF variance: it is a Rube Goldberg contraption. It is extremely consumptive of EPA resources. It requires decisions to be made by the States, reviewed by the regional EPA, and then reviewed by EPA headquarters.

It is far more efficient to resolve questions about subcategorization in a single rule making proceeding. EPA has been able to do so. In the interim between the circuit court decision and the Supreme Court decision, EPA issued six final and four proposed pretreatment standards—all on schedule and all without the safety valve of the FDF variance.

Senator **Chafee**. Your time is up, do you have something on the waivers?

Ms. **Dubrowski**. Yes, Senator. We are very pleased to see that S. 652 proposes to curtail the section 301(g) water quality waivers.

Our testimony shows that many of the so-called "nontoxic" pollutants eligible for these waivers are known or suspected carcinogens. Some are severely curtailed under other statutes.

EPA does not have the ability to do a case-by-case, stream-segment-by-stream-segment analysis of whether any of these pollutants have an adverse water quality impact.

This is particularly critical in the pesticides area where 133 pesticides which would be controlled under EPA's proposed BAT standard are not on the toxics list. So we applaud that provision of S. 652.

We would, however, ask the Committee to reconsider the safe harbor aspect of its provision; that is, the provision that would grandfather-in all of the pending 301(g) variances.

Senator **Chafee**. All right, thank you very much, Ms. Dubrowski. Mr. Malloch.

Mr. **Malloch**. Thank you, Mr. Chairman.

Senator **Chafee**. Do I understand that you argued the case that Ms. Dubrowski was talking about?

Ms. **Dubrowski**. I argued.

Senator **Chafee**. I know you did. Is Chemical Manufacturers Association arguing the other side?

Mr. **Malloch**. You are talking about the nonconventional variance provision?

Senator **Chafee**. Yes, the FDF.

Mr. **Malloch**. Yes, sir, we are.

Senator **Chafee**. Good, OK.

STATEMENT OF CHARLES MALLOCH, MONSANTO CO., ST. LOUIS, MO, ON BEHALF OF THE CHEMICAL MANUFACTURERS ASSOCIATION

My name is Charles Malloch. I am director of regulatory management of Monsanto Co. I am appearing today on behalf of the Chemical Manufacturers Association. My background includes over 16 years of manufacturing management. I am now responsible for Monsanto's corporate Clean Water Act affairs.

Today, I will address the major issues of concern to CMA, which include compliance deadlines, administrative civil penalties, criminal penalties and permit terms. My written testimony also discusses several other issues which are of concern to CMA.

The quality of our Nation's water has improved tremendously since the early seventies and the requirements of the Clean Water Act have played a major role in bringing about this improvement.

However, some adjustments to the act are necessary. This is especially true of the Act's compliance deadlines. The current Act requires compliance with BAT/BCT limitations by July 1, 1984. That date has long since passed and EPA has still not promulgated effluent guidelines for several major industries. The issue is not whether the deadline should be extended but rather how long such an extension should be.

Any deadline must provide sufficient time for EPA and the States to incorporate issued guidelines into permits and for industry to then design and install the needed equipment.

Compliance with BAT/BCT limitations should be required within 3 years and 6 months after promulgation of the guidelines. This would give both the issuing agency and industry adequate time to perform their tasks. EPA and the States would need about 6 months to incorporate the guidelines into permits and industry would need 3 years to meet the limits.

Turning now to the issue of administrative civil penalties. We believe that the proposed new system in S. 53 is not needed for adequate enforcement of the act and is not consistent with the way that EPA establishes discharge limitations.

EPA effluent guidelines are designed to be achievable a high percentage of the time, usually 95 or 99 percent, for well-operated treatment systems. This means that a certain number of violations are likely to occur even at well operated plants.

Under the act's current enforcement provision, EPA must review violations carefully to decide which are serious enough to warrant filing a lawsuit and asking the court to impose monetary penalties. The incentive to exercise this discretion and judgment will be lost if EPA is able to assess administrative penalties for any violation of discharge limits, even those which were built into the limits themselves.

If Congress, nonetheless, authorizes EPA to impose administrative penalties, a permittee should be given the procedural protection of a hearing under the Administrative Procedures Act before any penalty is assessed. In addition, a permittee should not be subject to both an administrative penalty and a citizen's suit on the same violations.

S. 53 would also greatly expand the scope of the act's criminal penalties provision. We understand that this was intended to address congressional concern with discharges by midnight dumpers into municipal sewer systems. Criminal penalties are appropriate for serious offenses which threaten public health or the environment. However, the proposed bill is far broader than needed to address this type of problem. For example, a responsible plant owner or operator who is in compliance with all applicable permits and regulations could be found criminally liable for routine discharges. Further, the new provision is so vague that a plant owner or operator would have no clear idea of what is allowed or prohibited.

If Congress decides to adopt a criminal penalty amendment to address the midnight dumper problems, that provision should be carefully drawn to address those particular concerns. Any criminal penalty provision should ensure that a responsible discharger would not be criminally liable for a discharge to a sewer system or POTW if that discharger was in compliance with all applicable Federal, State and local requirements.

On the issue of the duration of NPDS permits, we support extending the term of most permits to 10 years. This would reduce EPA and the State's regulatory burdens and delays in processing permit applications and would increase stability in compliance planning by industry.

However, we do not agree with S. 53's broad mandatory reopener provision which accompanies the revised permit term. This reopener would negate the benefits of the 10-year permit. If a reopener provision must be included, it should require reopening of permits only to incorporate more stringent toxic effluent standards under section 307(a) of the act.

Mr. Chairman, this concludes my oral presentation. As I mentioned at the outset, the written testimony that I am submitting today will address several other issues. Thank you.

Senator CHAFEE. Thank you, Mr. Malloch. Dr. Gillett.

STATEMENT OF DR. JAMES W. GILLETT, PROFESSOR OF ECOTOXICOLOGY, CORNELL UNIVERSITY, ITHACA, NY

Dr. GILLETT. Thank you, Mr. Chairman. My name is James Warren Gillett. I am a resident of Ithaca, New York, where I work as a professor of ecotoxicology, Cornell University. I have spent the last 22 years studying toxic substances and pesticides and I appreciate the opportunity to come before this committee to discuss the problem of nonconventional versus conventional pollutants.

Right now, I am working with the Institute of Comparative and Environmental Toxicology and the Ecosystems Research Center at Cornell University. I have been consulting for the Interagency Testing Committee of the EPA, where I had been employed at the Corvallis Research Laboratory from 1974 to 1983.

It is on that context of work with toxic substances and testing that staff contacted me regarding the amendment for waivers for 301G. The task before you is a complex one, but I think you have a good solution presented in your amendments.

When Congress created the classifications of conventional and nonconventional pollutants and prescribed appropriate technology levels for their control, the list of "priority pollutants" was added to the conventional pollutants, and best available technology had to be applied to the removal from their waste streams.

On the other hand, toxic chemicals which were not on that priority pollutant list could be waived as nonconventional pollutants. That includes a very large number of chemicals, 50,000 to 70,000 right now. The guidelines are just being prepared for them by EPA.

Many manufacturing industries, including the pesticide industry, using toxic chemicals classed as nonconventional pollutants are not regulated under the same standards as apply to the priority pollutants.

And yet if we look at the two sets of chemicals in terms of their toxicity, in terms of their bioaccumulation potential, and in most any way in which we would characterize them, you find them not essentially different.

In my written testimony I have characterized the problem as trying to have a leash law for lions and bobcats and allowing leopards and tigers and housecats to roam the streets, except downtown where you will give them a waiver if they are well behaved.

There is just no way you can distinguish between these two sets of lists. I think this has bothered a lot of people for a long time. We have toxic chemicals in the pesticide industry and many industrial chemicals being waived. Alternatively, a large amount of State and

EPA resources are tied up reviewing these waivers, and the toxics are still being released over the time that the permit is being considered.

Most of the chemicals that are on the nonconventional toxic lists that I have examined fit the same general characteristics as chemicals that are on the "priority pollutant" list. Maybe some of the worst ones are brought together by the NRDC staff when they first proposed the priority pollutants.

There is just variation, not a completely distinguishing difference. We don't have any single set of characteristics that tell us how "bad" these chemicals are. We can take some examples and look at the situation.

Mirex is a pesticide that is also manufactured as a truck tire flame retardant called dechlorane. Mirex is very closely related to kepone and kepone is a pesticide, which as you may recall, was involved in Hopewell, VA, in a very serious and costly accident or discharge there.

Yet, we can discharge mirex that can be converted to kepone in the environment. This puts us in the position of having a leash law for the mountain lion but not a leash law for pumas. It is the same chemical, a different name, the same problem. Kepone and mirax are on two separate lists.

We need to amalgamate these two lists and convert them to one. You have two ways of doing this before you. One would be to take a retrogressive step and convert the "Priority Pollutants" back to nonconventional pollutants. I don't think you, in your wisdom, you would ever do that.

Going the way that you have proposed here in the act through converting all of them to toxic pollutants by deleting the waiver, would end this irrationality.

There may be a time in the future where we could have waivers. I am not sure when that will be.

If we are ever going to have effective, reasonable waivers, we must start now, looking at problems such as persistence, obtaining data and a solid context for evaluating that data. I look to industry to, particularly industrial associations like CMA, to make strong steps in that direction.

Right now the step you have to take is the one you have proposed here, to amend the Clean Water Act to delete the waiver provision within 301G.

Senator CHAFEE. OK, fine. I just want to see if I understand completely what you are saying, Dr. Gillett. Are you saying that there is no scientific way to account for these two lists; namely, the toxic pollutants and the nonconventional?

And what you are saying is that you can have some highly toxic pollutants on the nonconventional list?

Dr. GILLETT. Yes.

Senator CHAFEE. And that we ought not to give waivers for any of them?

Dr. GILLETT. Right.

Senator CHAFEE. Combine the lists in effect.

Dr. GILLETT. Right.

Senator CHAFEE. Repeat your example that you have of a nonconventional pollutant that is highly toxic.

Dr. **Gillett**. Well, one of the most obvious one is mirex. It is a pesticide. We have since ceased manufacturing it for general use in that area, but it is the compound which is converted to kepone by sunlight.

Senator **Chafee**. So, some of these nonconventional pollutants, in effect, are even more toxic than those on the list?

Dr. **Gillett**. Oh, yes; there is a number of chemicals on the priority pollutant list that are not as toxic as mirex. There are probably some chemicals on the priority pollutant list that are substantially less toxic than a great number of chemicals, such as some of the organophosphates insecticides that have substantial persistence in the environment.

When you are trying to regulate by color BOD, or some other nontoxic standard for nonconventional pollutants, then you find yourself in a very irrational position; you can have these very toxic chemicals passing through a treatment plant designed to not allow BOD to be released.

That is not the standard that you are trying to apply here.

Senator **Chafee**. No; some day, perhaps, we will be able to know enough to predict the ecotoxicology of these toxic pollutants.

Dr. **Gillett**. Yes, sir; on a case-by-case basis we can do it. But as Ms. Dubrowski said, there is no way that we can do this on a stream-by-stream, lake-by-lake basis right now. It is just not possible at this stage to do that. We don't have the knowledge.

Senator **Chafee**. And so what we are doing, in your judgment, is we are tying up EPA staff and EPA resources on questions that can't be answered? Meanwhile, the pollution continues.

Dr. **Gillett**. Yes; and you also end up with legislative, regulatory or policy differences. The same chemical used for different purposes is treated by different legal approaches in a peculiar way which ignores the toxicology. So I think you can harmonize that.

Senator **Chafee**. What do you say about that, Mr. Malloch.

Mr. **Malloch**. First of all, Mr. Chairman, one of the things that concerns me about this is that there is such a wide universe of nonconventional pollutants or nonconventional substances. And as you are well aware, which you stated in your introduction to S. 652, the substances included in this wide universe are all that are not on the toxic pollutant list or not conventional pollutants.

What concerns me about this is that we are looking at a situation that is really a case-by-case determination. If there are substances that truly do exhibit toxicity to a point that they should not be waived from the technology based standards of the act, I certainly don't believe that those substances would ever pass the stringent demonstrations that EPA has set up for 301(g).

On the other side of the coin, if you totally ban any 301(g) possible waivers, you are going to be cutting out substances such as ammonia as an example, which is generated in many waste treatment operations as a part of the operation itself, as part of the biosystem in the operation.

These are in very small quantities. And they are not quantities at any level that can harm or cause any problem in the environment. And yet, without the waiver provision, we would have to put in very expensive treatment facilities to treat that type of substance.

Basically, our position is something like this: We believe that if a substance is truly toxic, there are ways to list it on the toxic list. But if we ban them, all 301(g) waivers, we have cut out everything. And I think that is going too far.

Senator CHAFEE. Well, what is your answer to that, Dr. Gillett?

Dr. GILLETT. Well, the first place, ammonia.

Senator CHAFEE. Let's take ammonia.

Dr. GILLETT. Ammonia can be a very serious pollutant to both the air and the water from POTW's. Maybe 50 percent of the air pollution by ammonia comes from these plants and a substantial percentage of water pollution by ammonia comes from these plants, which is a problem.

That is a very good example of a chemical which we need, that is part of biological processes. We can't escape needing ammonia, but in excess, it is a typical toxicant. In excess, it causes problems.

And it is this sort of regulation that doesn't occur when you are trying to regulate ammonia by color or pH or total phenols. It does require a lot of attention by our State and regional offices.

Senator CHAFEE. Well, one more shot, Mr. Malloch.

Mr. MALLOCH. My concern is that if you remove the 301(g) provision—and I am not a scientist, I am an engineer—if you remove the 301(g) provision, you are cutting out forever the opportunity that industry or a discharger has to make a demonstration that the pollutant in concern can, in fact, should, be waived because it causes no problem to the environment or the public health.

Senator CHAFEE. All right, well, that will give us something to brood over. Let's go back to the FDF's. Ms. Dubrowski, let's go into your theory that you don't think the FDF's should act as a safety valve. One of the arguments, obviously, is that the FDF's protects the BAT standards from lawsuits and delays by giving those that would challenge the regulations in court a separate standard.

Ms. DUBROWSKI. I don't buy that argument, Senator. EPA is saying, "We need the FDF variance for one of two reasons: either because we don't get information in a rulemaking, or because we don't consider it."

If industry does not give EPA information in a rulemaking, it does not have the right to bring that information to a court's attention in the first instance. So, not having the FDF variance, in essence, does not jeopardize the standards.

With respect to information that EPA has but doesn't consider in a rulemaking, frankly, if EPA doesn't consider information, its rules are very vulnerable to a legal challenge as arbitrary and capricious—whether or not there is a variance.

There have been very few cases which even discuss the FDF variance in the context of a challenge to an EPA standard. EPA has cited at most three such cases over the course of the existence of the FDF variance. Those cases either did not deal with BAT or pretreatment standards for toxics or did not really rely on the FDF variance as a reason for a decision.

If you look at the new source standards, those do not contain an FDF variance. Yet, EPA has not been hindered either in its ability to issue those standards or defend them in court.

Senator CHAFEE. What do we do about it? Let's take the Alaska pulp mill. There, obviously, it was very expensive and time consuming to have the FDF variance. But wouldn't it take just as long if we had to create separate subcategories for each facility that was fundamentally different?

Ms. **Dubrowski**. No.

Senator **Chafee**. Aren't you going to spend the same amount of time doing that, making the subcategory?

Ms. **Dubrowski**. No; it would be much more efficient and much faster to do it in the rulemaking. Because in the rulemaking, the data base is fresh before you and the same people working with that data base are deciding whether a particular facility is the same or different from others.

In an FDF variance, the rulemaking is finished. Then, a State official who has not been involved in this rulemaking proceeding at all must try to decide how this source compares to the others considered in the rulemaking. That decision is then reviewed by the EPA regional office. That, in turn, is reviewed by EPA headquarters. There is a tremendous duplication of effort. EPA has estimated that processing a variance could triple the resources involved in a permit application.

There is a faster and more efficient way to do it. From a management perspective, since we are talking about scarce resources, we think it is better to do it in the rulemaking. EPA, by virtue of having this variance, doesn't avoid a subcategorization problem; subcategorization is an issue routinely raised in rulemaking now.

All we are saying is that industry should not have a second bite at the apple—after the standards are set—to relitigate the question of what the standard should be for an individual source.

Senator **Chafee**. Well, obviously, this is incredibly complicated and even that fount of wisdom, the Supreme Court, ended up five to four.

All right. Well, thank you all very much. You have given us food for thought. We appreciate your coming.

Ms. **Dubrowski**. Thank you, Senator.

Senator **Chafee**. None of these seem to be simple.

The next panel: Mr. Zimmerman, environmental counsel for Occidental Petroleum on behalf of National Environmental Development Association; Dr. Jay Hair, executive vice president of National Wildlife Federation; Mike McCloskey from Sierra Club next to Dr. Hair; then Richard Austerman, special counsel to AMAX. That is it.

All right, gentlemen, why don't we start, go in order.

Mr. Zimmerman, on behalf of the National Environmental Development Association, we welcome you here.

STATEMENT OF JEFFREY ZIMMERMAN, ENVIRONMENTAL COUNSEL, OCCIDENTAL PETROLEUM CO., WASHINGTON, DC, ON BEHALF OF THE NATIONAL ENVIRONMENTAL DEVELOPMENT ASSOCIATION

Mr. **Zimmerman**. Thank you, Mr. Chairman. My name is Jeff Zimmerman, director of regulation and compliance and counsel for environment for Occidental Petroleum. I am here today speaking on behalf of the Clean Water project of the National Environmental Development Association. I chair their technical committee.

With me today is Dr. William J. Haun who is vice president, engineering policy for General Mills and chairman of our project and, I believe, testified before this committee in the last Congress on this act.

Rather than go through the written statement that we have submitted to you, I would, in the interest of time, like to go right to the points that I would like to explore today with you. There are six areas that are detailed in our written statement. Let me briefly summarize.

First concerning the permit term and reopener provisions in S. 53, currently, there is a 40 percent backlog of pending permit applications in the Federal and State permitting system and this is a fairly consistent figure of a backlog, approximately 40 percent, maybe even as high as 60 percent on occasions.

It has been a backlog that EPA and the states have been operating with since the very day that the Clean Water Act was first passed in 1972. For this reason we think that a number of changes to the Act are warranted to deal with this backlog.

It is an inappropriate situation for us to be operating under and we would like to applaud the provision in S. 53 would extend the maximum term of a permit from 5 to 10 years.

Now, when you do that, the question of how you reopen the permit and under what circumstances you do that to incorporate changes in under regulation becomes very important.

Currently, EPA's regulations and the practices of most States, allow for a variety of reopening situations, during the life of these permits, and specifically provide for reopening on a mandatory basis whenever a new standard is promulgated for toxic pollutants. I think we should focus our concerns on toxic pollutants and their affects on water quality.

We should look therefore at new toxic standards, water quality limited streams, potential hot spots that may exist in receiving waters and new stream standards as those are adopted by states.

The largest percentage of permits in the system are not considered significant by the agencies that administer the permit process. I think we should let the permit writers focus their resources on the significant permits and go through the insignificant permits or the minor permits one time and put them on the shelf unless there is a change in a toxic standard that effects those permits.

On the subject of compliance deadlines in S. 53, our only concern with the bill is the end date of July 1, 1987, that has been included. There are at least six categories of EPA's effluent limitations for BAT and BCT that will not be promulgated in time to allow for the 3-year lead time that experience shows is needed to install and prove up the technology to meet the new standards.

We have advocated that a uniform 3 years lead time for compliance on a BAT or BCT standard is promulgated or a BPJ permits is issued, should be the period of compliance that the law provides.

On the subject of antibacksliding, we believe in general, the provision in S. 53 is a very good provision. It does deal with the situation where a BPJ permit has resulted in a level of pollution control being achieved that is more stringent or more successful, let's say, than a subsequent BAT and BFC standard. And it does not allow

INTENTIONA

BLANK

backsliding for the new BAT or BCT standard and we think that is appropriate.

There is a possible problem of interpretation that I would like to highlight for you. That is a BPJ permit may not have been written in the same terms as the subsequent BAT or BCT standard. So that while you may have a BPJ permit written in terms of total pounds or discharge rate over a period of time, the subsequent regulation may be expressed in terms of concentration or production rate.

And so that we are not comparing apples and oranges, we would ask that you clarify a history of this provision that you do not mean to include a calculation based on that transfer from BPJ to BAT terminology.

We would hasten to add that we think to go further than the provisions in S. 53 will also restrict any other change in the permit conditions that is not related to the level of pollution control that has been achieved is probably inappropriate.

There are a number of BPJ permits that include a condition such as studying, monitoring, reporting requirements that were used on a one-time basis by permit writers to obtain a baseline of information about an operation. And the purpose—terms have served their purpose.

And we think now there is no particular need to retain those where it won't allow the permit writer the flexibility to perhaps change his focus and require some additional information that he may want on a one-time basis in the second round, for instance, of permit writing.

Senator **Chafee**. Mr. Zimmerman, you have to move along. Your time is up, but I want to hear you touch on these other points.

Mr. **Zimmerman**. All right. Concerning the nonconventional variance limitation, I believe that the law presently provides for a stringent test, based, including toxic activity testing—to decide whether a variance should be allowed.

If EPA wants to regulate a substance as toxic, it has a provision in 307 to do that. If we are concerned about the toxic effects of these pollutants, I think they should be regulated as toxics pollutants.

Until we know more, I think that the flexibility provided by the variance provision needs to remain in the Act so we can deal with these situations as they arise.

Concerning criminal penalties, there is a point of fundamental unfairness, we believe in the current language of S. 53 where an indirect discharger, who is in compliance with all his Federal, State, or local requirements or permits, might be prosecuted for a violation of the POTW discharge permit, where the POTW is the party that is in violation of its own permit and the indirect discharger is strictly in compliance with all the requirements that apply to him.

We think that the criminal law ought to be written in the clearest possible terms and we would ask that either that provision be deleted or that an affirmative defense be provided for compliance with Federal, State, and local permits.

Finally, on construction grants, we would applaud the provisions in your bill, Mr. Chairman, and in S. 53 on continuation of this very much needed program. It is very important to your industrial members as well as to our labor members but we think that the 4-year phase down in the administration's proposal is too fast.

We also believe that the restriction against new startups, new projects, and their phasing out of the innovative technology approach to municipal treatment is probably inappropriate.

Senator **Chafee**. Inappropriate?

Mr. **Zimmerman**. Inappropriate. We believe that innovative technology ought not to be discouraged.

Senator **Chafee**. Can you cite for us an example where something has happened under it?

Mr. **Zimmerman**. Yes, there are some carbon treatments systems that are innovative technologies from the standpoint of applying secondary treatment. Typically carbon treatment is considered a tertiary or third-stage treatment technology when it is used in a small scale. We can use it in a large scale basis and achieve very good control of a wide variety of pollutants.

So you have a very diverse industrial mix of uses of a POTW rather than have to have an elaborate pretreatment program, a good carbon bed system of absorption of a wide variety of pollutants can very effectively supply you with very good if not better than secondary treatment.

Senator **Chafee**. Has that been tried anywhere?

Mr. **Zimmerman**. Yes, it has been tried in approximately 20 cities, to my knowledge.

Senator **Chafee**. All right. Thank you.

Dr. Hair, please.

STATEMENT OF JAY HAIR, EXECUTIVE VICE PRESIDENT, NATIONAL WILDLIFE FEDERATION, WASHINGTON, DC

Dr. **Hair**. Thank you Senator Chafee, and members of the Committee. I do, indeed, appreciate the opportunity to appear before you today on behalf of the National Wildlife Federation's 4.5 million members and supporters including our 52 State affiliates.

We have had a longstanding interest in cleaning up America's lakes and rivers and we have been following closely the reauthorization of the Clean Water Act.

I have with me this morning Mark Van Putten, the director of our Great Lakes Natural Resource Center and an expert on matters relevant to the Clean Water Act. And he will also be available for questioning, if you so desire.

We have submitted a written statement with exhibits for inclusion in the records of this hearing.

At this time I would like to summarize a few key points. The National Wildlife Federation is joined with a number of government, industry and citizen's, and environmental groups in formulating a consensus agenda for maintaining and improving the Clean Water Act.

Together we have identified five elements of a reauthorized act which we believe are essential to continuing the Nation's progress in cleaning up our water.

The five elements in our consensus agenda include: One, maintaining and increasing the Construction Grants Program for sewage treatment facilities; two, maintaining the present pretreatment program to control toxic pollutant discharges by industry into sewers; and three, adopting a mandatory nonpoint source pollution program.

Our testimony today will focus on the two other elements of our consensus agenda, the need to retain a 5-year limit on the terms of wastewater discharge permits and the need to enact an antibacksliding policy to protect our water quality gains.

Before addressing these two points, however, let me congratulate you, Senator Chafee, for scheduling oversight hearings of the administration of the Clean Water Act, section 404 program. We applaud your efforts and those of the other members of the committee to protect the wetlands.

We hope that oversight hearings will allow this subcommittee to examine fully the substantial evidence demonstrating that the 404 program as administered by the Army Corps of Engineers is not adequately protecting the wetlands.

The National Wildlife Federation would welcome the opportunity to appear at the subcommittee hearings. Due to the army's failure to protect the wetlands adequately, primarily as a result of irresponsible leadership from the political appointees, the 52 State and territorial delegates of the National Wildlife Federations's annual meeting 2 weeks ago here in Washington——

Senator CHAFEE. All right, Dr. Hair. You know how I feel about 404.

Dr. HAIR. Yes, sir.

Senator CHAFEE. I don't want to slow you down on that, but our time is limited. Why don't we move on with the other points?

Dr. HAIR. OK. Let's move on then, sir, to the NPDES permits. As you know, these are the primary means for implementing the Clean Water Act. These permits limit the kinds and amounts of pollutants discharged by industries and municipalities into our lakes and rivers.

Under current law these permits are limited to a maximum term of 5 years. On the expiration of a permit, a discharger must apply for a new permit and can continue to discharge as authorized by the old permit until the new permit is issued.

S. 53 would allow permits to be issued for up to 10 years. We oppose this lengthening of the term of NPDES permits for the following reasons: First, it would delay controls on toxic water pollutants.

Over the past year, the National Wildlife Federation has surveyed all of the States approved to administer the NPDES program and we are convinced that the mandatory water quality-based permit reopener contained in S. 53 simply will not work. Therefore, S. 53 would delay for a decade updating controls on toxic pollutants.

Second, the information provided by the dischargers as part of the permit reissuance process about the constituents of their wastewater provides a unique snapshot of pollutants discharged into particular lakes and rivers.

The National Wildlife Federation, like many conservation and public interest groups, regularly uses this information to identify the source of pollution problems.

Third, permit writers must give public notice of proposed permit renewals. This provides the public a chance to help protect or clean up their favorite rivers or lakes. Ten-year permits would mean that citizens could only seek improved control on a particular discharger once a decade.

Now, on to the antibacksliding issue. Simply put, the idea behind an antibacksliding policy is that each successive NPDES permit issued to a discharger must be at least as stringent, if not more stringent, than the previous permit.

Unfortunately, EPA recently weakened the application of its antibacksliding policy to water qualitybased effluent limitations by expansively interpreting the "new information exception."

EPA's new approach will greatly increase the circumstances under which NPDES permits may be reissued with less restrictive limits than those contained in the old expired permit. As a result, dischargers will be allowed to turn off existing treatment facilities to save operational and maintenance costs. This change means more pollutants will be discharged into our lakes and rivers.

As a minimum, these goals mean that the discharger cannot increase their discharge of pollutants whenever water quality improves beyond that required to meet water quality standards. They mean that dischargers that have invested in water pollution control facilities must continue to operate those facilities, even if we cannot prove a direct environmental benefit for every increment of treatment.

Finally, these goals mean that the only thing left to argue about in reissuing expired NPDES permits is whether additional treatment is needed, not whether existing treatment will be continued.

In conclusion, Mr. Chairman, the National Wildlife Federation urges you to make these improvements in S. 53 in order to protect and enhance water quality in our lakes and rivers. We believe that you will be convinced of the need for improvement in section 404 by the conclusion of your oversight hearings. Therefore, we urge you to delete the 10-year provision from S. 53.

With that, sir, I will conclude and wait for further questions.

Senator CHAFEE. Thank you, Dr. Hair. We are delighted to have you with us.

A distinguished member of this subcommittee, Senator Simpson has joined us. He has numerous other duties in his capacity as the whip for the majority.

Senator, if you have a statement that you would like to give, this would be an appropriate time.

OPENING STATEMENT OF HON. ALAN K. SIMPSON, U.S. SENATOR FROM THE STATE OF WYOMING

Senator SIMPSON. Mr. Chairman, you are very kind. I appreciate that. I want you to know that I intend to work closely with you on this Clean Water Act material. I know what you do and I know how you do it and I know how very capable and skilled you are. I think it is important that we address it. I just want you to know that I think it is very important that we do act on it this year. I think we did a pretty good job last year in resolving some of the issues. This year, we face the issue of how to phase out the Wastewater Construction Grant Program.

You, sir, have been the one that put together the concept of "fishable" and "swimable" and it is a very important one. I always like to draw the distinction between the western States and the eastern States with regard to water—which is pure gold in our part of the country—there exists very different water management, and very different water laws.

Even the nature of the beast, the doctrine of prior appropriation versus the doctrine of riparian rights, which is a lot different than people are aware of here. They don't understand.

It is called prior appropriation. Actually it is higher appropriation. Whoever is highest on the crick is what we call it out there in Wyoming.

Anyway, trying to do something about controlling a small stream in Georgia is a lot different than trying to control a stream in Wyoming which has boulders as big as cookstoves.

Another thing, Mr. Chairman, is the slow incursion of using the Endangered Species Act and the Clean Water Act have resulted in some curious bits of litigation where they have taken a pretty good swipe at State water law.

I think we have to take a close look at that because under the constitution of western States, the water belongs to the State of Wyoming or to the State of Montana or the State of Idaho. I think we have to pay close attention to the legitimacy of those rights and not see them peeled away because of something, say, taking place at a nesting ground in Nebraska which has to do with the quantity of water in Wyoming. That was never intended, at least in this Senator's mind.

So with those points, piquing your curiosity with those points, I will leave it at that. But I think it is very important that we remember that States have the ability to control their water and these things are troubling. With that, I thank you, Mr. Chairman, and I appreciate your courtesy.

Senator CHAFEE. Well, thank you, Senator Simpson. It is a pleasure to have you here to drop those mild bombshells as we proceed through these hearings. Any time you feel you can be better occupied some other place, please feel free.

Senator SIMPSON. I am going.

Senator CHAFEE. We will be delighted to accommodate you.

Senator Symms, also a westerner of considerable note, I am glad you are here. At least I am glad you are here so far.

Senator SYMMS. I don't have any statement to make, only to say that I was enjoying the music that was being so eloquently sung by my colleague from my neighboring State.

I appreciate you moving forward with this and I want to work with you on it.

Senator CHAFEE. As you know, it is my intention to proceed to the markup next Thursday and I hope you can be here because obviously your contributions would be most helpful as they have been in the past.

As you know and as Senator Simpson mentioned, we went through this process last year and came to naught. But this year we came back again with a deadline of September 30 plus the added complication of the Construction Grants Program.

So I do hope that you can set side next Thursday, April 4, to be here. It would be most helpful to all the rest of us.

Now, do either of you gentlemen have any questions of the prior witnesses that you want to pursue?

Senator SIMPSON. No, sir.

Senator CHAFEE. All right. I might proceed then with Mr. McCloskey from the Sierra Club.

Mr. McCloskey, welcome.

STATEMENT OF J. MIKE McCLOSKEY, EXECUTIVE DIRECTOR, THE SIERRA CLUB, SAN FRANCISCO, CA

Mr. MCCLOSKEY. Thank you, Mr. Chairman. We appreciate having the opportunity to testify here today on the reauthorization of the Clean Water Act. The Sierra Club has joined with 12 other environmental and Government and private organizations in supporting four amendments to S. 53 and S. 652.

Our proposed amendments to the Clean Water Act legislation are directed to the 10-year NPDS renewal period, extending the antibacksliding provision, adding to funding for the control of nonpoint pollution from the three construction grant set aside programs, and increasing the construction grants fund above the current $2.4 billion level.

Because of limited time, I would like to discuss only one of these amendments to S. 53, this morning, that being the antibacksliding provision. Though we very much concur with what Dr. Hair has said about the importance of only having permits be 5 years in length, we do not have any faith that reopeners would, in fact, work. In fact, we think that if we go to 10 years, we will be locking ourselves into 10 more years of pollution at today's level.

On the question of antibacksliding, some members of this subcommittee may recall that when the Clean Water Act was passed in 1972, the subcommittee spurned the notion that the "solution to pollution be dilution".

I am sorry to report that Congress's rejection of this concept did not seem to stick. With the apparent approval of EPA, granting of seasonal waivers and weakening of NPDS discharge permits, when they are renewed, reissued or modified, are all becoming major problems.

In effect, the assimulative capacity of rivers and lakes is being used as an excuse to reduce pollution control efforts that are already in place or scheduled to be put in place. We are not the only ones concerned about backsliding because S. 53 does take a first step in trying to deal with it.

However, more needs to be done. The antibacksliding provision should not only apply to "Best Professional Judgment" permits but also to permits based on best Available Technology [BAT] effluent guidelines.

If antibacksliding covered permits based on the BAT guidelines, it would mean that once the discharge standards were written into permit, the State could not allow more pollution under seasonal waivers or other exceptions. It would also prevent backsliding if a

State were to downgrade a classification of a particular stream segment.

In other words, extending antibacksliding to cover BAT would provide a uniform floor for industrial pollution. Once this floor is obtained, it should not be weakened. The act needs to be amended so as to prohibit the weakening of NPDES discharge permits when they are renewed, reissued or modified and to prohibit the seasonal granting of waivers.

A report to EPA recently obtained through the Freedom of Information Act demonstrates that seasonal waivers are a growing problem. Of 46 States responding to the survey, at least 29 States frequently use seasonal waivers. It has become a common practice in many States to grant industries and municipalities winter waivers that allow higher levels of pollution in their discharges during the colder months, when rivers supposedly have a greater assimulative capacity.

Senator CHAFEE. Mr. McCloskey, you know you have only a total of 5 minutes. So I would keep that in mind.

Mr. MCCLOSKEY. Yes. The continued use of backsliding is tearing a giant hole in our Nation's water pollution clean-up effort. If we are ever to hope to reach the goal that the Clean Water Act set to achieve waters safe for swimming and fishing, backsliding must be stopped.

It is a bad idea. We will never reach our clean water goal if our rivers and lakes are always filled with the maximum amount of pollution that they can possibly stand.

The act requires national uniformity in standard setting so that all industries with NPDES permits will be treated in the same manner. A permittee should not be put at an economic advantage or disadvantage with similar firms in other parts of the country or within the same State.

Now, in some rare instances, the original permit may have been written without the benefit of adequate scientific data on which to base the discharge standards. Therefore, when the permit comes up to renewal and the firm can make the case that the discharge standards were not realistically set, and the permit limits could be relaxed without causing damage to water quality, we agree then, that an adjustment could be made.

However, backsliding should not be allowed merely because additional assimilative capacity is thought to be available or because of changes in waste-load allocations.

I will stop at this point, Mr. Chairman.

Senator CHAFEE. I see. You are not going to discuss nonpoint pollution?

Mr. MCCLOSKEY. I can briefly summarize our recommendation as to that, Mr. Chairman. We believe that the various set-side programs that are now underway, the Innovative and Alternative Technology Program, the Governor's Set-aside Program, and the Rural Program, might all be used in a way that allows States more flexibility so that the moneys in them can be used to control nonpoint pollution also.

This would not require more money, but we do support keeping the funding for the Innovative and Alternative Technology Programs at the current 4-percent level. We think in this fashion you can get more mileage out of that funding and more innovation can be accomplished, and this very serious problem of nonpoint runoff can be addressed in a more effective fashion.

Senator **Chafee**. How about your thoughts on the construction grants?

Mr. **McCloskey**. Here Mr. Chairman, we are mindful of what you said at the outset, but we are also mindful of the fact that EPA has just issued a report that looks forward to the year 2000 and sees something over $108 billion needed to complete the job that Congress began many years ago.

We are deeply troubled by the disparity between that figure and the funding that we are talking about now. So we definitely urge you to look seriously at how to provide more funding.

Senator **Chafee**. It is my understanding that that EPA estimate included growth, collectors and reserve capacity. Are you enthusiastic about that?

Mr. **McCloskey**. No, we have never endorsed everything that is done along that line.

Senator **Chafee**. As you know, we don't do that. We don't provide for growth and collectors. But the EPA estimate does, according to my understanding.

My brief question is: You support our position that the objective should be clean water, not for providing for growth?

Mr. **McCloskey**. Yes, yes, we do.

Senator **Chafee**. All right, fine.

Mr. Austerman.

STATEMENT OF RICHARD O. AUSTERMAN, SPECIAL COUNSEL, REGULATORY AFFAIRS, AMAX, INC., DENVER, CO, ON BEHALF OF THE WESTERN REGIONAL COUNCIL

Mr. **Austerman**. Thank you, Mr. Chairman. My name is Rich Austerman. I am a lawyer from Denver, CO. I am appearing today on behalf of the Western Regional Council and the Colorado Water Congress. We appreciate the opportunity to speak to you as noted by Senator Simpson.

The efficient management of water is of enormous importance in Colorado and in the intermountain West.

This part of the country is arid and to a much greater extent than the east or on the west coast, the growth of our agriculture, our cities and your industry has depended upon the careful development and the efficient use of our scarce water resources. No less will be required in the future.

The written comments I have submitted address three issues. Those are State water rights versus zero discharge goals; storm water runoff; and water quality standards.

For the purpose of the hearing today, I would like to restrict my comments to a single topic, that is EPA's use of water quality standards and the effect they have on Western water users.

To be blunt, we have a problem with the way EPA is presently implementing the act. Let me state the problem as briefly as possible. First of all, we do agree, wholeheartedly, that the water quality standards must protect public health.

Second, we also agree that there is a need to protect aquatic life and habitats and it would be desirable to protect sensitive species and a wide variety of species in all stream segments.

However, we do not believe that States should be required, as a matter of Federal law, to protect the most sensitive aquatic life in all stream segments, not at least, when this level of protection will require water users to use enormous sums of money to treat their dischargers well beyond the secondary treatment or well beyond BAT.

In such circumstances, we believe that the States need more discretion than they currently have to decide if the benefits of extra treatment are worth the expense. As the statute is presently implemented, water quality standards can be changed but they cannot be adjusted downward, ever, for the sole reason that the benefits are not worth the cost.

In some cases this restriction can result in treatment requirements that I can only characterize as being very wasteful. In other cases, to avoid such requirements, permitees are electing to eliminate their discharges by adopting forms of wastewater treatment that are 100-percent consumptive of the water. In effect, they are drying up the stream in the name of protecting it.

I have cited some specific examples in my written materials. This has become quite a problem in Colorado. Due to the press of time, I would prefer not to repeat them now. But the problem is severe, we believe it is growing worse rather than getting better.

In this part of the country, streamflows tend to be highly seasonal. To begin with, even if there were no water useage, streamflows are very low for most of the year.

Furthermore, because the region is arid, large amounts of water are often diverted out of the streams so that the water can be put to beneficial use. The effect of this is that individual discharges often constitute the entire flow of the stream near the outfall. In contrast to other parts of the country, there is little or no water in the stream to dilute the effect of the discharge.

Now let me reemphasize that we are not asking you to relax the uniform nationwide technology-based treatment standards, BAT and new source performance standards. Nor are we asking that you compromise standards that are designed to protect the public health, whether directly or through protection against bioaccumulation and things of that sort.

All we ask is that you do give the States the discretion to decide how hard and how quickly to push beyond this in the management of their water resources.

That is all I will say for right now.

Senator CHAFEE. Well, thank you very much, Mr. Austerman. Senator Hart and Senator Mitchell, do you want to submit a statement at this time, either of you gentlemen?

Senator HART. Mr. Chairman, only to join you in welcoming the witnesses, particularly Mr. Austerman. I am pleased to have him speaking for interests in our State and our region. I have some questions at the appropriate time.

Senator CHAFEE. Fine, all right. Senator Mitchell, do you have a statement you would like to submit?

Senator MITCHELL. No; I do not, Mr. Chairman. I made one at the opening of the hearings 2 days ago. I will have questions for these panelists. I will have to leave so I may have questions in writing for subsequent panels that I would like to have submitted with responses in writing at their convenience.

Senator CHAFEE. You will be able to stay through this panel?

Senator MITCHELL. Yes, sir.

Senator CHAFEE. All right. Why don't we start the questions now and limit each question to 5 minutes and then we can come back again if that is not adequate.

Mr. Austerman, as I understand what you are saying here, you are advocating that we give the States the right—if I can phrase it my way, and you may disagree with this—to weaken the cleanup controls which are set by EPA and to eliminate the public hearing process.

Now, isn't this a back door way of downgrading the water quality standards?

Mr. AUSTERMAN. No; I don't agree with your characterization of what we are asking.

First of all—and let me speak about Colorado because that is the state I am the most familiar with—the water quality standards I am talking about were adopted by the State, not by EPA.

And in most cases, the water quality standards were extremely aggressive. They, essentially, were goals. In some cases people have been able to obtain those goals. In some cases, they are having trouble.

I think we have all, at one time or another in our lives, tried something that we decided wasn't a good idea and this is all we are referring to here. We are not talking—and, frankly, I can't remember the second half of your question.

Senator CHAFEE. It seems to me what you are saying is that what you seek, as I understand it, is a redesignation of the water quality standards for streams with low flows. Under the regulations we could permit that rather than downgrading the stream quality. As I see it you are coming about it in a round about way.

In other words, what you are trying to do is weaken the permit rather than doing this through the regulations.

Mr. AUSTERMAN. The problem that we are having is that the regulations do not allow any reconsideration of goals that were established in water quality standards. The way the act is written and the way the regulations implement the act, once a water quality standard is adopted, it was effective, had to be protected by July 1, 1977.

So, as soon as the standard is adopted, permitees who discharged to that particular stream segment, have that standard back-calculated into their permit and they have got to meet it.

Now, since we are talking about the problem of going beyond secondary treatment and going beyond BAT, very often people really don't know if they are going to be able to treat their effluent to the required extent. Sometimes they are, sometimes they aren't.

Senator CHAFEE. Well, it is getting fairly complicated. The other day, Mr. Ravan, who is the Assistant Administrator for Water, told us that the water quality standards for streams with low flows could be redesignated, that the regulations could permit that. It seems to me that is a better way to go than to downgrade the stream quality by lowering the requirements in the permit.

There are two different ways to proceed. It seems to me that what you want to do is to lower the requirements in the permit rather than to proceed by doing it through the regulations which would permit the redesignation of the standards for streams with low flow.

Mr. AUSTERMAN. I think we are talking about two different things. I have spoken with Mr. Ravan about this in the past. I believe that EPA's current policy is that a stream standard can be adjusted for a variety of reasons. Of course, low flow is one of the reasons.

The difficulty is that the way that is being applied is that the low flow has to so seriously affect the habitat of these aquatic organisms that the particular classification was never obtainable in the first place, as a technical matter.

What we are saying is that on some of these streams, it may be possible as a technical matter, say to raise the water quality to the point were you protect a very wide and broad aquatic life, but it costs so very much and in a lot of cases I am talking about municipal dischargers here, not just industrial dischargers. People simply don't think it is worth it. We are not talking about eliminating the aquatic life, we are talking about a stressed aquatic life.

Senator CHAFEE. Let's move on.

My last question in this round is to Mr. Zimmerman. What you are objecting to is the compliance deadlines that we have set in here. Did you testify it should be 3 years beyond——

Mr. ZIMMERMAN. Three years from date of issuance of the EPA regulation.

Senator CHAFEE. Yes.

Mr. ZIMMERMAN. Or the BPJ permit.

Senator CHAFEE. Our problem is that if you postpone the deadline, then the standards get delayed. This thing has been going on as a kind of chicken-and-egg situation. Where do you finally draw the line? Our feeling was just set the deadline.

Mr. ZIMMERMAN. That has been our problem too, Mr. Chairman. Unfortunately, the act does not provide the industrial discharger with a safety valve in the event that EPA doesn't promulgate the regulation on time. The current act has a July 1, 1984, deadline, as you well know.

You are proposing in S. 53 to expand that to 1987, but our experience with such deadlines is that it has always been that no matter how many times the Congress tells EPA to meet those deadlines and no matter how many times industry puts pressure on EPA to meet those deadlines, they don't meet the deadlines with a defensible regulation.

Now, we suggest that—we are getting pretty close to getting over this problem, we think. Perhaps they will meet their objectives this time of getting these regulations out on time. Our experience has been that they will not.

As I understand it, for the six categories that are outstanding at this point, the last of those is expected to be published in the spring of 1986, under S. 53's provision. That would give the dischargers in that particular point source category 1 year and 3 months, let's say, to achieve compliance with those new standards.

If those standards require additional pollution the control technology to be installed, our experience has consistently been since we started this technology based program in 1972, that it takes approximately 3 years to design, engineer, construct, and get a system operating to achieve those standards. This is why we have suggested a uniform 3 years from the date——

Senator CHAFEE. Well, everytime we turn around, somebody sues them, which delays the promulgation of the standards. It is a pretty good way to do it. Here is a list of the various suits that have taken place. Every industry involved sues EPA regarding the regulations, regarding the standards, so they never get promulgated.

Mr. ZIMMERMAN. I recognize that.

Senator CHAFEE. But what we are saying is, "Look, that has gone on long enough. We are not going to tolerate these suits anymore. We want to get on with the show."

Mr. ZIMMERMAN. Mr. Chairman, I recognize that industry has brought suit to challenge regulations that have been promulgated when they believe that the record isn't adequate to support the regulations that the agency has come up with.

It is the deadlines in the first instance that prevent—may prevent the agency from doing a good regulatory job the first time around.

Senator CHAFEE. Sometimes we think they are just suing in order to delay the publication of the standards. My time is up.

Let's see, Senator Symms is next.

Senator SYMMS. Thank you, Mr. Chairman. Mr. Austerman, in your testimony, you say that, "I have cited some specific examples in my written materials but due to the press of time I prefer not to repeat them."

Could you give me one specific example of what you are talking about here?

Mr. AUSTERMAN. Well, there are a lot of different types of situations. Let me describe one that comes up quite often. Suppose you have either an industrial facility or sewage treatment plant that is located adjacent to a fairly small tributary, maybe a half mile long, to a much larger river.

With the Agency's adopted water quality standards—the way this typically works is that the standard will apply to a very long stretch of stream and all the tributaries to that stream will be covered by the same standard.

When this facility wants to get a permit, very often it will find, because of the smallness of this tributary, the effluent limitations that are proposed are extremely stringent, far beyond the secondary treatment or BAT. And it is going to cost an arm and a leg which the owner of the facility may or may not have.

Now, if you look at the physical situation, if the discharger were discharging to the main stream, there would be no problem. You could protect the stream standards with secondary treatment of BAT. So, the issue becomes how important is this one little tributary?

Is it worth anywhere from say $10 to $50 million to protect—keep a class 1 fishery in this little area? Or does it just make more sense to base the permit on protection of the stream?

Well, to date, the uniform answer that we have gotten is that since that tributary has been classified and since the classification is technically obtainable, it can't be touched. The result is, in some cases, I think people have spent the money to add on the treatment. In most other cases, they have simply built a big, ugly pipeline to the big river so that they are discharging into a different water body.

To me, that doesn't make any sense.

Senator SYMMS. Thank you, Mr. Austerman.

Thank you, Mr. Chairman.

Senator CHAFEE. Senator Hart.

Senator HART. Mr. Austerman, those of us from the West, whether it is clean water, clean air legislation, whatever, constantly try to be mindful ourselves and remind our colleagues from the different parts of the country of the different climatic and geographic situations that we face. Your testimony this morning is premised upon the semiarrid situation that prevails in our region.

I am wondering, if you have an explanation as to why I have not heard from the government of the State of Colorado about this issue or for that matter, I don't think any municipalities. You broadened the umbrella to include not only private but public interests as well.

Mr. AUSTERMAN. I think for two reasons. First of all, the problem is just developing. In some respects, notwithstanding the problems the State has been having with EPA in the past year, Colorado is in the forefront in this area.

Looking at S. 53, particularly section 106, which deals with water quality standards, Colorado, as a practical matter, has already done most of what S. 53 would require. They have adopted very stringent use classifications. They have adopted very stringent numeric water quality criteria for both toxics, nonconventional and conventional pollutants. And we are just now—that process was just completed about a year ago.

We are just now beginning to enter the second round of permitting where people are seeing, in some cases for the first time, what the impact of these standards are. Our company was probably one of the first to be affected by this. We were back here last session. We sort of felt like a voice in the wilderness because it really wasn't affecting too many other people.

It has recently been determined that some 72 municipalities are going to have to install advanced waste treatment because of either the ammonia water quality standards or oxygen water quality standards. Previously there has been facilities in Colorado, sewage treatment facilities, that have had to install these processes. But it has been fairly limited.

But now, all of a sudden, you are seeing every little publicly owned treatment works in the State going to have to put in airstripping or break-point chorination or something like this. And it has just this year become apparent. This came out in some recent water Congress discussions.

I think the city of Colorado Springs has tried to make some contact with your office. But it is just a developing issue.

Senator **Hart**. Let me know if they have any trouble. It is just a phone call. We hear from the cities all the time. So I guess the short answer is that we are going to be deluged from both the State and local level, public and private, about this problem.

Mr. **Austerman**. Yes. It has come, especially with the municipal dischargers and the fact that the grants program doesn't help them with advanced waste treatment so they are going to have to come up with the money themselves.

Senator **Hart**. Given the stringency of the State law now, and your plea, as I gather it, for flexibility, what advantage will there be to, in effect, grant that flexibility at the Federal level if the State law is at least as strict as the Federal law?

I am not quite sure how this is going to work.

Mr. **Austerman**. The problem revolves around two issues.

Senator **Hart**. Excuse me, one second. I am just looking at your testimony where you have a recommendation.

Mr. **Austerman**. Yes.

Senator **Hart**. You say, "In view of the situation, a practical solution is probably to amend section 302 to allow the State as well as the Administrator to determine that on a permit-by-permit basis."

That is the context of my question.

Mr. **Austerman**. Yes. Basically we think that would be a good solution. In fact, that is the way that the Colorado Water Quality Control Act was originally designed. There are basically two ways to attack the problem. I think we can make some temporary or permanent change to the water quality itself or you can allow some sort of variance—I know that is a bad word—but in the permits and keep the standard in place as a goal.

The way the State act was written and, in fact, the way it is still written is that it was to allow the latter procedure where you could, on a case-by-case basis, review the impact of a water quality standard on a permittee and essentially get a variance. EPA objected to that. They are forcing the State to amend the statute to kick that into a rulemaking type of procedure. And frankly, we wonder if the benefits—it has become a substantially more complicated procedure.

We think that our original approach was better.

Senator **Hart**. So you have a complaint at both the Federal and the State level, in other words. You want the Federal law changed and you want the State law changed.

Mr. **Austerman**. I would like the Federal law changed. I would prefer to leave the State law as it is. But we were being forced. There is a bill in the legislature now that has just passed the Senate. It is still before the House.

Senator **Hart**. And that one you don't like?

Mr. **Austerman**. Right. Is that correct?

Senator **Hart**. I am reading it. I think it is the same one as Senate bill 83.

Mr. **Austerman**. Yes.

Senator **Hart**. The bill summary says, "Limits the issuance of variance which conflict with provisions of the Federal act." That is what you don't like?

Mr. **Austerman**. Right. EPA has taken the position that section 302 of the Federal act, as it presently stands, does not allow the type of variance that section 302 contemplates to be issued for water quality standards. It has to be a variance from some requirement that is more stringent than the water quality standard.

Senator **Hart**. So it is not going to help you very much if we amend the Federal law, as you wished, to permit the State flexibility if, in fact, the State legislature prohibits variance?

Mr. **Austerman**. Right, unless it decides to change the law again in response to what you do.

Senator **Hart**. Mr. Chairman. I think my time is up. I would like to hear from the other witnesses, particularly those representing the environmental community. But whatever is appropriate.

Senator **Chafee**. Senator Mitchell, why don't you proceed for 5 minutes. We can come back.

Senator **Hart**. All right.

Senator **Mitchell**. Thank you, Mr. Chairman. My question is addressed to all members of the panel and I ask them each to briefly answer the question on permit terms. The proposal of extension of the term from 5 to 10 years is the subject of debate in these hearings for the past couple of days.

EPA and the industry generally argue that longer terms are needed to prevent backlog and provide regulatory relief. Environmental and other groups are concerned that longer terms may not be necessary and will slow the implementation of toxic controls.

I would like to ask each member of the panel to comment. I will ask a series of questions that are all related.

I understand, Mr. Chairman, that Ms. Prothro, who is the Director of the EPA Waste Permits Division in the Office of Water, is present and she may wish to make a comment on some of these questions.

First, is there a backlog? Second, if so, is it in major permits or minor permits or both? Will a 10-year-permit term delay implementation of toxic control? If so, should a 10-year-permit term be limited to conventional pollutants, leaving toxics at 5 years?

You may begin in any way you want. Perhaps in the order that you are listed here, Mr. Zimmerman, Mr. Hair, Mr. McCloskey, and Mr. Austerman. I would ask Ms. Prothro if she wants to comment briefly.

Mr. **Zimmerman**. Senator Mitchell, to respond to your questions in the order that you raised them, our latest information from EPA, which is dated March 15, is that of 63,529 MPDS permits in the system, currently expired or pending for issuance or reissuance are 25,542, a figure that works out to just over 40 percent.

Of this number, the major permits at State and Federal level combine to approximately 7,370 permits of which 1,800 are expired. That is approximately, I would guess, around 23 percent. Somewhere in that area.

Minor permits at State and Federal level combine to approximately 56,100 permits of which some 20,000 are expired.

I think Mr. Ledbetter from Georgia made the point most clearly yesterday, concerning the needs of the States to concentrate their permit writing resources on the more significant permits, the so-called major permits.

I believe that this argues for a discretionary rather than a mandatory reopener because that would allow the administrative agency or the permit writing agency to set its own agenda on where it is going to concentrate its limited manpower resources and they can then concentrate on the significant permits.

I believe there is a backlog. I am frankly confused by a statement of my collegue, Dr. Hair, today, that the 10-year permit might delay implementation of toxic pollutant controls. I don't believe that is the case.

EPA regulations which are applied in all of the States as well, under the State programs, specifically require, in section 122.62, and section 122.44B of EPA's regulations that if a toxic pollutant standard or effluent limitation is promulgated, the permit must be reopened to incorporate that new toxic limit.

Now, Dr. Hair mentioned two other concerns that he had with why we shouldn't go from a 5- to a 10-year permit. His organization needs the information that is submitted when an industrial permit renewal is submitted. I would suggest that the regulations and the law under section 308 of the Clean Water Act now have extensive monitoring requirements. Most of the permits require additional monitoring requirements, EPA or State permits. And this provides extensive information available on the public record on the operations of the dischargers.

Lastly, Dr. Hair commented that there is not public notice of the—there is public notice of the renewals of the permits and this is why a 5-year permit is better, from their viewpoint, because it provides them with an opportunity to get involved in the process, so to speak.

Certainly, any draft permit that certainly—any draft permit that EPA issues, or that the State issues, has to be noticed and there is an opportunity for public comment, on any modification in EPA's regulation—any major modification, that includes virtually only typographical errors or any considered minor modifications. But on any major modifications, EPA regulations already provide for public notice and comment.

Senator MITCHELL. Well, the others will have to wait their turn, I guess. I have given the others plenty of time to think up their rebuttal.

Dr. HAIR. Senator Mitchell——

Senator CHAFEE. No, you are not on yet. It is Senator Hart's turn. If you would please.

Senator HART. Let's go ahead. I am perfectly willing. I think we are truncating things a little bit. Go ahead.

Senator CHAFEE. All right. If the answers can be a little more concise because we do have to move on here.

Dr. HAIR. I have a very concise answer, Senator Chafee.

Senator Mitchell, to your specific question, I guess I would summarize by saying that the proof is in the pudding. And the National Wildlife Federation contacted all of those States that are now certified to issue NPDES permits. They strongly—the people who are out there doing the work—they strongly encouraged us not to increase from a 5- to a 10-year time period.

They say they need that degree of control. And we are going to support people who are out there actually issuing these kinds of permits, because we believe that is right also.

As it relates to the question whether or not there should be some flexibility in allowing an administrator of EPA or an appropriate State authority to cut some kind of a deal that doesn't involve public review, we find that, quite frankly, reprehensible.

We would not allow that kind of activity to occur in the Clean Water Act or any other appropriate kind of public decisionmaking process.

What if, for example, Senator Hart, we were to have another Administrator from EPA like the last one that came from Colorado? They were to cut some kind of a deal with a person who had similar views? How is the public's interest served in that kind of a category? They simply are not.

And those of us who are concerned about both economic development and responsible environmental protection are always going to find a way for the public to be represented in these decisions.

Thank you, sir.

Senator Hart. With all due respect, where the last Administrator came from was an accident of politics.

Dr. Hair. I would agree with you that that particular beef did not come from Colorado.

Senator Chafee. It is Senator Mitchell's time. It is his time.

Mr. McCloskey. Mr. Chairman, we just recently saw a report from the Water Office at EPA which suggested that for the major permits that EPA expected, they would be caught up in 1986 on all of them.

Now that doesn't deal with the minor ones, but that would suggest, that if indeed that claim is correct, that the problem will be solved here next year. And, thus, the claim of a backlog on the real important permits will be behind us. So that leads us to think that there is no need from that vantage point to extend the permit time period out to 10 years.

Now, if we get further clarification of that, and indeed there does seem to be something of a problem, we think that a reasonable compromise would be along the line of allowing 5 years for toxics and 10 years for others, but we think a lot more needs to be known about this alleged backlog.

Mr. Austerman. Can I go? I don't have a lot of statistics. My impression is that, yes, there is a lot of backlog. I think it applies to both major and minor permits.

In my experience, what the people in the permits issuing agencies do is try to give attention to those discharges that they think are presenting a problem. Obviously, there is a certain amount of individual discretion involved in this. It doesn't always work.

Whether extending the permit to 10 years will effect this, I personally think, as a practical matter, it is a good idea because extending the permit term or shortening it isn't going to change the manpower situation and that is what is causing the backlog. There is a mechanism in most permits now to reopen the permit if a toxic should become a problem. That is not going to help you, as the shorter term is not going to help you, if there is not people to take a look at the situation.

Dr. **Hair**. Senator Chafee, if I could comment on this issue of a backlog. I have before me a document from the EPA office of water issued February 28, 1985, which says, "By fiscal 1986, EPA and most NPDES states will have essentially eliminated the backlog of expired major municipal and industrial permits and will concentrate on reissuing timely, high quality permits as they expire."

The folks in charge say there won't be a backlog problem.

Senator **Hart**. Mr. Chairman, I would like to hear from Mr. Hair and Mr. McCloskey in response to Mr. Austerman's testimony, if you have any.

Senator **Chafee**. One minute. Didn't you have a question. Wasn't Martha going to respond?

Ms. **Prothro**. I will be happy to, Senator. The statistics that Mr. Zimmerman ran off appear to me to be identical to the ones that I have. There is a backlog problem. At the same time, we think that we will eliminate or substantially eliminate, with a few exceptions, the backlog of major permits by the end of fiscal year 1986.

The States, we expect, will do the same in most cases but there remains a large number of minor permits that will not be addressed within that timeframe. Our position is that a 10-year term may be appropriate for those smaller discharges.

I know we are talking about 60,000 to 70,000 total facilities regulated under this program, some of which are as minor as swimming pool dischargers, others are organic chemical facilities. For the smaller dischargers, we think a 10-year term may be appropriate.

Senator **Mitchell**. May be what?

Ms. **Prothro**. May be appropriate, yes.

Senator **Mitchell**. So you would suggest a category different than toxic/nontoxic and one of major/minor?

Ms. **Prothro**. Well, a toxic/nontoxic split does it pretty well for us, I think.

Our idea was that if we had the flexibility to extend to a 10-year term in certain cases, that we would, by regulation, proscribe appropriate terms from various categories of facilities.

We haven't completed the analysis of how they would break out and what categories, but certainly for primary industries, which are the toxics dischargers, we would anticipate that a 5-year term would continue to be appropriate.

Senator **Chafee**. Senator Hart.

Dr. **Hair**. Senator, I responded in terms of the question whether or not there ought to be public involvement in the decisionmaking process. I think I made that point very clear. It seems to me rather ironic that here we are in 1985 talking about permits for pollution. It seems to me that the real point of emphasis ought to be that American industries and units of government, whether they be at the Federal, state or municipal level, ought to understand and ought to enforce the fact that if you are going to do business in this free enterprise system in this day and age, one of the costs is internalized environmental protection.

It is no longer allowed or desired by the American people to externalize pollution. It certainly is an attitude that has to be changed. Why is it that every time we come to hearings like this, we see the industrial community lining up on one side, we see the environmental community lining up on another side, and what it is we are trying to achieve is a better, more wholesome environment.

Why is it that we always hear industry saying, "Give us more freedom. Give us more flexibility. Trust us."? But we look at the record and know that there are some real problems there. It simply is time that we understand that environmental protection is a mandate of the American people, stronger than any other force living in our society and that we have appropriate laws and regulations to control that. It is as simple as that.

Senator CHAFEE. Senator Hart.

Mr. ZIMMERMAN. Senator, would you like the industrial community, or part of the industrial community to respond?

Senator HART. Well, I wanted particularly the environmental community but go ahead.

Mr. ZIMMERMAN. I would like to associate myself with Dr. Hair's remarks. I believe that we are internalizing those costs. I believe that the pollution control record of the industrial point source categories is very good. It is not perfect. It is not a perfect world. We are trying to do better.

We are dedicating a great deal of our resources to do better. I believe though, that as far as this permit term issue is concerned, maybe Ms. Prothro and EPA have a good suggestion, to have one permit term or one set of conditions concerning reopeners that would apply to those dischargers that are involved with any of the priority pollutants or so-called toxic pollutants and another category or permit term or set of reopeners that would apply to nontoxic type discharges. There are a wide variety of types of permits in the system.

I think whether there is a backlog or not is not really the major question. The major question is where are we going to focus what resources we have in the future. I believe it is appropriate to focus those on the serious environmental problems that remain, on characterizing the nature of toxic pollution and its effects on water quality and in dealing with that and not on whether a particular discharge from a less significant or insignificant source, which is well controlled under the current system, needs to be reopened or relooked at every 5 years.

Mr. MCCLOSKEY. Senator, I have already addressed the 5-10-year permit question. Do you want me to address Mr. Austerman's point?

Senator HART. Mr. Austerman's point as it relates to low stream flow, western particular problems.

Mr. MCCLOSKEY. Well, on that question I would like to counsel with my colleagues more, but I can offer a few random thoughts.

First of all, we are dealing with an Act that ultimately looks to zero discharges, and this will mean that some dischargers will have to move farther along toward that goal than others, and that we are dealing here with standards set by the states that apparently they thought were important for those extremes.

I am mindful of the fact that often tributary streams are extremely important for fish spawning purposes and provide special habitats that sometimes aren't available in the main stems of the stream.

I don't think we can just assume because they are small tributary streams, that they were not very important. Thus, I think we would place a lot of importance on the State's decisions that these streams deserve to have extremely high levels of water quality.

Senator **Hart**. Thank you very much, thank you.

Senator **Chafee**. Two quick questions.

One, to Mr. McCloskey: How about a provision that allowed 10-year permits for dischargers of only conventional pollutants?

Mr. **McCloskey**. Well, Senator, that might be just fine if there is this backlog from what we just heard. It seems to me we were talking more about minor dischargers that are conventional, (neither toxics nor majors), because, apparently there is no real problem on the major ones.

Senator **Chafee**. What we are trying to do, obviously, is to have EPA personnel work on the more serious problems. What do you say to that, Dr. Hair?

Dr. **Hair**. In theory I cannot disagree that we ought to free them up to deal with more serious problems. But when I look at a Nation making the kind of expenditures we do nationwide—we only spend in essence the cost of one Trident submarine for the EPA's operating budget—it seems to me we ought to reallocate some to higher priorities, providing more funding, more manpower for EPA to do the kind of job that the American people expect it to do.

Senator **Chafee**. Give me an answer to my question, though, if you would. What do you think about 10-year permits for only conventional pollutants?

Dr. **Hair**. Well, if it is just conventional pollutants, obviously, we want to have some greater control on those that are going to have the greatest impact on the environment. For those that have the least impact, perhaps there is an opportunity for a longer time expansion. We are not convinced that that is the case yet.

Senator **Chafee**. OK. Mr. Zimmerman, a quick answer. You supported the antibacksliding provision language in the bill. Would you also support the antibacksliding for the seasonal waiver that Mr. McCloskey touched on?

Mr. **Zimmerman**. I believe, Mr. Chairman, that the seasonal waiver provisions are probably dealt with by the water quality standards program. I think the NEDA project probably would support use of that regulatory process rather than a permit-by-permit system.

But we will be happy to provide a more thorough response if you would like.

Senator **Chafee**. Thank you all very much.

The next panel will consist of the Honorable Tim Douglas, mayor of Bellingham, WA; Hope Babcock from the National Audubon Society; Ms. Merilyn Reeves of the League of Women Voters; and Mr. Sampson of the American Forestry Association.

Senator Gorton, we are delighted that you are here. Will you introduce one of the witnesses?

Senator **Gorton**. Yes.

Senator **Chafee**. All right. Ladies and gentlemen, if we could move to the table. Mr. Douglas, if you will sit over to the left. Why doesn't Senator Gorton sit on the extreme left with Mr. Douglas next to him? Then Ms. Babcock, Ms. Reeves and Mr. Sampson on the right.

We welcome you here, Senator Gorton. As a distinguished former member of this committee, we welcome and look forward to any remarks you have.

STATEMENT OF HON. SLADE GORTON, U.S. SENATOR, FROM THE STATE OF WASHINGTON

Senator GORTON. Thank you, Mr. Chairman. I appreciate your holding these hearings on the vital issue of Wastewater Construction Grants and particularly for recognizing the special needs of certain critically important bays and estuaries such as Narragansett Bay in your own State and Puget Sound in mine.

Senator Evans had hoped to be here with me today but he is busy testifying over in the House of Representatives and will be unable to attend this hearing.

Within the last year significant evidence has been received that serious water quality problems exist in many areas of Puget Sound.

The high concentrations of toxics pollutants and bottom sediments and the accompanying discovery of disease and biological abnormalities in fish and shellfish, indicate that the problems exist throughout Puget Sound, from Takoma to Bellingham and even beyond into Canada.

These problems are caused by a variety of activities including sewage discharge, urban development, storm drainage, septic tank failures, agricultural runoff and sediment dredging.

The problems are complex, exceedingly complex and almost as complex is the bureaucracy charged with protecting Puget Sound. There are about 450 governmental agencies which have some responsibility for water quality in that Sound alone.

There is a need for a coordinated effort to protect the Sound. A need to which both the State government and local communities have been quick to respond. Washington State's Governor established the Puget Sound Water Quality Authority, a commission charged with coordinating and focusing efforts to study the Sound.

Communities all over the Sound joined together to form the coalition for clean water to assist in this coordinated effort.

Pending before the State legislature is a proposal to create a State fund of $450 million to be used over the next 14 years to meet Federal clean water standards, over $300 million of which will be spent on Puget Sound. The likelihood of passage of that bill in the course of the next month is very, very high.

In other words, the State of Washington has made a major commitment to water quality in Puget Sound and here asks for continued federal support in achieving that goal.

Mr. Chairman, I believe that S. 652, the Construction Grant Transition Act, is an excellent method of providing that support. Of particular importance to Washington State is the National Estuary Program. That program would provide critical assistance to the State in establishing a coordinated comprehensive plan to solve pollution problems in Puget Sound.

As with other major estuaries, the Sound's natural characteristics require that water quality be dealt with as a common problem that needs a coordinated comprehensive solution. All sources of pollution, not just sewage discharges, must be addressed to achieve the goal of fishable, swimable water.

I want to emphasize, Mr. Chairman, that we are not here asking for some major new program which we are unwilling to accomplish ourselves. We are asking for modest recognition and assistance, not a leading or major Federal role.

At this point, Mr. Chairman, it is my distinct pleasure to introduce to you an authority on the problems of Puget Sound, the mayor of Bellingham, Washington, Mr. Tim Douglas.

Mayor Douglas represents the Coalition for Clean Water, the organization about which I spoke earlier, as well as the city of Bellingham, which is located on the shores of Puget Sound, as widely defined, in the northern part of the State.

Mayor Douglas has been intimately involved in a variety of efforts to deal with pollution problems in the Sound and has knowledge and experience and wisdom to share with you.

I thank the distinguished Chairman of the Subcommittee for allowing Mayor Douglas this opportunity to share his thoughts with you today.

Senator CHAFEE. Thank you very much, Senator Gorton, for that excellent statement. It is obvious from what you said that the State of Washington is doing its part. Coming from a relatively small state, I am dazzled by the statistics that you gave. You are talking in terms of $300 million.

Senator GORTON. That's correct.

Senator CHAFEE. That is a lot of money to us in Rhode Island and it is obvious that, as I say, your State is pitching in and doing its part. So we thank you for coming. I know you have other duties so don't feel obliged to stay. But we are thankful that you came in to introduce Mayor Douglas.

I have been to Bellingham, Washington, years ago, and found it a very interesting city. It struck me that the shoreline looked like Maine except when the tide went out then there were long, long flats, as opposed to the deep drop-off in Maine.

So, why don't you proceed, Mayor Douglas. Glad you are here.

STATEMENT OF HON. TIM DOUGLAS, MAYOR, BELLINGHAM, WA

Mr. DOUGLAS. Thank you very much, Mr. Chairman.

Thank you, Senator Gorton, too, for your introduction.

I might add that another major difference between Bellingham's shoreline and Rhode Island is that the sun sets on the wrong side on your side of the country.

I am mayor of a community of approximately 50,000 in the Pacific Northwest. We are located just 20 miles south of the Canadian border and on the northern reaches of Puget Sound and its adjacent waters.

I am also chairing the Coalition for Clean Water which Senator Gorton has mentioned. It is a self-generated state-wide group of cities and municipal sewer districts that are trying to come to grips with water quality problems, particularly those of Puget Sound.

Rather than read the testimony that I have already delivered to your people, I will simply ask that it be entered into the record. I would like to highlight some of the comments in that testimony.

First of all, preservation of Puget Sound and adjacent waters is an absolutely crucial issue to all of us. And we are concerned. That, more than anything is what I would like to communicate to you people here today.

We know that we must preserve and enhance the waters of this very valuable estuary and for that reason, even our small community has funded this opportunity for me to come and speak to you about the problem.

Our waters are absolutely vital to the economy and quality of life in the northwest. Fishing and the shellfish industries are very important in this biologically rich estuary and recreational opportunities for both our growing population and the Nation are important parts of the economy.

We are making progress in the clean up. In our city, for example, we now have a seal colony, living right on the shoreline downtown. The reason that they are there is because the salmon have returned and so have the steelhead. We have the hottest steelhead fishing stream in any major city anywhere in the United States.

Senator CHAFEE. Is that because the rivers have been cleaned up or is that a phenomena that you are not quite sure of?

Mayor DOUGLAS. That is largely because the Georgia Pacific pulp mill in our community has installed a treatment lagoon, which made immediate and dramatic improvements on water quality in Bellingham Bay.

In fact, the timber industry now has to stack its logs on the shore because the toredo worms have returned and would destroy any logs that are simply floating, waiting for shipment. So we have seen dramatic improvement.

Senator CHAFEE. Because the what have returned?

Mayor DOUGLAS. Toredo worms. They eat wood fast in salt water.

Senator CHAFEE. Is that because the river is cleaner?

Mayor DOUGLAS. That is because the bay is cleaner and some of the streams have been improving as well.

But Bellingham Bay has been significantly impacted by the pulp mill there because of its effluent. However they have installed a lagoon which now treats their effluent, and that has made a dramatic change in water quality in the bay.

Senator CHAFEE. Is the return of the toredo worm a significant advancement in the ecology?

Mayor DOUGLAS. We have the largest salmon fishing port on the west coast. Those vessels used to pull up alongside the mill and sit there for a couple of days to get rid of everything that was clinging to their hulls. They don't have that treatment available anymore.

The toredo worm is not a positive element except that it represents a significant return of a lot of sealife to Bellingham Bay.

Senator CHAFEE. All right. Won't you proceed.

Mayor DOUGLAS. Yes; recognizing the needs that we have just addressed, we have, as Senator Gorton indicated, moved to significant action in the state and regionally.

First of all, we have established the coalition that I mentioned. That was done by Mayor Rice of Anacortes and me. We have significant participation from areas throughout Puget Sound in that group.

We drafted legislation for a $450 million bond issue and are very pleased that Governor Gardner has incorporated that in his major request legislation in his very first term before the legislature.

One element of that bill, would make possible a loan program, which is similar to what you have been proposing. We feel also it is important to have a plan to which we would become completely committed in the state.

There is, right now, a bill to establish a Puget Sound Water Quality Authority, which would analyze the problems of the Sound, devise a plan and prioritize action within an 18-month period.

As government, I think it is very important for us, particularly in the face of an increasing strain on our revenue, to spend money very wisely, particularly, I think, to maintain the support in this area of an often cynical public.

A plan would deal with water quality in Puget Sound as a single common problem, not many separated elements. This plan, just as that proposed for Narragansett Bay, would give us the opportunity to prioritize the activities and maintain the most cost beneficial program.

The reason we are supporting your national estuary legislation is that we think it would help us, in a comprehensive manner, identify priorities both in Puget Sound and the adjacent waters in British Columbia for secondary treatment in appropriate basins of the Sound, for combined sewer overflows and for nonpoint sources of pollution, all of which are very important in our area.

With the endorsement of the Governor, this plan then, would become a final plan constituting a binding commitment for all of the local dischargers. It would outline steps and timelines for compliance.

Regarding the continuation of the Construction Grant Program, I want to say that that is absolutely vital to us. This $450 million program that we are pursuing with the State would represent only 25 percent of an anticipated $1.3 billion cost for water pollution questions.

The local share would be at least 50 percent. So we are not asking for the government to take care of the problem, the Federal Government entirely. The local governments will be doing much.

We realize that Congress is wrestling with a very difficult problem of trying to cut Federal budget deficits while also maintaining Federal programs. However, we are required by Federal law to provide secondary treatment of wastewater at very high cost. We believe that the Federal Government must continue to provide substantial funding to enable us to comply with those Federal requirements.

These expenditures are one-time capital costs and are not an endless Federal commitment. A foreseeable end to the funding does exist and can be predicted.

Local governments, governments like mine in the city of Bellingham, would continue to pay all of the costs for maintenance and operation of plants and for growth-related construction. That is a major commitment to water quality.

We support the water quality goals of the Clean Water Act. But we must maintain our funding partnership if we are going to achieve them.

Senator **Chafee**. Thank you very much, Mayor.

Ms. Hope Babcock, of the Audubon Society.

STATEMENT OF HOPE BABCOCK, DEPUTY COUNSEL, NATIONAL AUDUBON SOCIETY, WASHINGTON, DC

Ms. **Babcock**. Thank you, Mr. Chairman. I am here representing the National Audubon Society, a nationwide nonprofit organization of one-half million members. A high priority of our members is protecting the quality of our Nation's waters. Therefore, I particularly appreciate this opportunity to testify.

Audubon supports S. 53 and S. 652, although we would like to see those bills strengthened as I describe in my written testimony and summarize in part here today. I would ask, if you could, that the full testimony be inserted in the record as written and submitted.

Senator **Chafee**. That is fine. We will do that.

Ms. **Babcock**. Thank you.

We oppose the administration's package of proposed variances, stays and extensions. In the interest of time, I will limit my remarks to non-point source pollution and the declining health of our bays and estuaries.

I do mention two other areas of concern in my written testimony, the recent U.S. Supreme Court decision on toxic variances in the pretreatment program, addressed earlier by Ms. Dubrowski; and the administration's proposed variance for coal mining, which we oppose. I, of course, would be pleased to answer questions on either of those topics, if time permits, and you wish. There is today broad-based agreement on the need to control nonpoint pollution and surprising agreement on how to do that. Cost calculated to be as high as $6 billion per year for just erosion-related pollutants and the appreciation of the national extent of the problem have helped forge that consensus.

The Nonpoint Pollution Control Program proposed in section 319 of S. 52 represents a balanced compromise, a workable combination of incentives and requirements which should enable the process of controlling nonpoint pollution to start.

I emphasize the word start because I think we all appreciate that this program only starts the process of abating nonpoint pollution. A second and even third look at how we go about the task of controlling this form of pollution may be necessary as we gain experience under this program.

Again, because of time constraints, I will address only one of the ways suggested in my written testimony that section 319 might be strengthened and that concerns the relationship between nonpoint sources of pollution and ground water contamination.

There is increasing evidence of a relationship between nonpoint source pollution and ground water contamination. Let me cite two examples of this from my written testimony. The most recent dramatic example, of course, is occurring at Kesterson Wildlife Refuge in California where high levels of selenium, arsenic, and heavy metals have been found in the refuge's reservoir as a result of agricultural drainage in the San Joaquin Valley.

My fellow panelist, Neil Sampson, cites a second example in a recent paper of his, that concerns the high levels of nitrogen found in Nebraska's ground water: levels that are twice the national drinking water standards for that pollutant. Excessive nitrogen reduces the oxygen carrying capacity of blood which can lead to oxygen deprivation, or in extreme occasions, asphyxiation—the so-called blue baby phenomenon.

A recent Australian study shows that there may be a relationship between levels of nitrogen comparable to those allowed under our drinking water standards and birth defects. So we may be talking about a potentially serious health problem, especially in the rural areas of our country where farm families drink untreated water and draw that water from relatively shallow aquifers that are recharged by infiltration through porous soil.

These aquifers are particularly susceptible to contamination from nitrates, pesticide residues and other water soluable pollutants. Intensified irrigation and farming practices employed around the country are increasing the rate at which these contaminants are moving to ground water.

The Department of Agriculture projects the usage of approximately 1.25 million tons of pesticides this year. The National Resource Council estimates that there are some 3,350 chemicals involved in that usage, of which only approximately 10 percent have undergone a complete health hazard assessment.

While it is true that the full extent of the relationship between nonpoint pollution and ground water contamination is not yet fully understood, it is important that the program set forth in S. 53 not make matters worse by inviting implementation of best management practices that could adversely affect ground water.

We have asked that the committee consider two minor changes to that program to respond to this potential problem. The first of these would direct States in the identification of best management practices to consider the impact of those practices on ground water so that application of those practices would not indirectly pollute ground water.

The second proposal would allow the Administrator of EPA to use the discretionary funds authorized in section 319(d)(2)(B) to assess the relationship between runoff and ground water contamination. Out of such efforts might come greater understanding of the dimensions of the problem.

I also suggest in my written testimony adding nonpoint source pollution control to the goals and purposes section of the act and amending section 303(c)(2) of the act to require States to adopt criteria for any pollutant for which EPA has issued a guideline under section 304(a)(1). In that regard, I truly appreciate the testimony of Dr. Gillett, earlier this morning.

I also recommend opening up the Construction Grant Set Aside Program for nonpoint source control funding, as testified to by the other national environmental organizations, and requiring the States to maintain their existing level of commitment to water pollution control as a condition precedent to receiving any new funds under the nonpoint program. These points are set out in some detail in my written testimony.

I would now like to turn quickly to the chairman's bill in which he proposes creation of a National Estuary Program. We are absolutely delighted with that proposal, as we are concerned about what is happening to our estuaries around the country. There is an urgent need to protect them and we think that your bill goes a long way toward starting that process.

We would, however, like to see the bill amended to authorize citizens to comment on the conservation and management plan that is submitted to the Administrator for approval and to petition the Administrator to convene an estuary management conference.

We are concerned that bays that are not subject to multistate jurisdiction, like San Francisco Bay—and here I correct my geography because I forgot the international aspect of your proposal. Puget Sound, of course, would qualify to participate in the program. But I think we may have a problem with San Francisco Bay qualifying and that bay is in serious trouble. A bay like San Francisco might not be able to make the interstate or international showing required by the first section of your proposal.

To remedy this, we ask that the Administrator be authorized to convene an Estuary Management Conference upon the request of a single State or of a Federal agency when it can be determined that there is a need for coordination between Federal agencies or between Federal and State agencies.

I then go on to make a few additional minor suggestions with respect to your program for an Estuary Management Program. I guess I will conclude here. I think my time is up.

Senator **Chafee**. Well, thank you very much, Ms. Babcock.

Ms. Reeves.

STATEMENT OF MERILYN REEVES, NATURAL RESOURCES DIRECTOR, LEAGUE OF WOMEN VOTERS, WASHINGTON, DC

Ms. **Reeves**. Mr. Chairman, my name is Merilyn B. Reeves. I am a member of the board of directors, League of Women Voters of the United States. I am here today to represent over a quarter of a million members and supporters who have long supported water pollution control programs. We have been active participants with State and local governments in planning and in problem solving.

I am here again to support this committee's efforts to strengthen the Clean Water Act and I am here again to ask you to do even more. I think that the program that is outlined in Senate bill 53 with strengthening provisions will be a significant start in controlling nonpoint pollution problems. I am going to direct most of my attention to that issue.

But first, I just briefly would like to comment on some other provisions. First, in regard to the five-year national pollution discharge system permit. I would like to point out that the permit is the foundation for enforcement. And it is not surprising to hear you say that it has taken longer than 5 years to be able to renew these permits.

As with any program, as it starts up and as with any program that does not have good history, it invariably takes longer. We believe it is not the time nor appropriate to lengthen this program to 10 years. We believe it is important that the provision of the 5 years be kept in the present law.

In regard to the Construction Grants Program, the Federal Construction Grants Program should be authorized—reauthorized at least at current levels, as you have indicated. Water quality would be improved as the program was expanded through the revolving loan fund or additional grant money.

While we believe that the Grants Program was not designed to last forever—we know that some abuses have taken place—it is an undeniable fact that until more money is provided, there will be a severe impact on the gains that have already been made on the Clean Water Act.

Now, in regard to nonpoint sources. Nonpoint sources have long been recognized as a serious water quality program. In the past decade, through the 208 process, through numerous studies that have been undertaken and funding by the Federal Government, we have developed a body of knowledge about the nature, the extent of and the potential solutions for nonpoint pollution that points to just one result and that is that we cannot afford to wait any longer to establish a mandatory effective, nonpoint pollution control program.

We think that S. 53 does establish the basic framework for beginning the control of nonpoint source pollution. We would like to emphasize in that the importance of the local involvement, which is there and the public participation.

S. 53 right now provides that States may make use of local agencies and organizations in developing and managing their nonpoint programs. It requires public comment before submission of plans to EPA.

Appropriate best management practices to control non-point problems are site specific. And we hope that States will make every effort to obtain substantial local input at the earliest stage of program development. Public understanding and support are fundamental and the public's role in designing this program from bottom up is critical.

S. 53 is a good first step. It suffers, though, from two fundamental problems. First, while this program will encourage States that are already doing a good job in controlling nonpoint to do more, it provides very few carrots and sticks to get States that are currently doing very little to act.

And second, even with this encouraging action of this first step, we believe the program will fail if it is not funded fully. We are in favor of the retention of the current levels of the title II construction grant funding for the current reauthorization period.

And we also favor the addition of a revolving loan fund. All money available under title II, and in particular, any money in a revolving loan fund, should be made available for the control of nonpoint source pollution where it will effectively improve water quality and is a cost effecient use of funds.

For example, the set aside accounts of title II offer a good source of funding for nonpoint source control. The governor's discretionary fund used in eligible projects should be provided with more flexibility. And since agriculture is a major source of nonpoint pollution, the rural community set aside is a natural place to go for non-point pollution control funds.

We were deeply disappointed to see that S. 53 decreases the innovative and alternative set aside from 4 percent to 2 percent. Although some of this money has been returned, we believe that there has been a—this has been a valuable program. And that it has worked fairly well.

EPA has awarded over 3,000 grants over the life of the program which have used over 90 percent of the money allocated for INA. 30 states are using these funds. By opening this program up to the alternative of nonpoint source control, more States would be available—would be able to take advantage of these funds. The INA set aside should clearly be retained at the 4 percent.

Now, the revolving loan fund offers special advantages for the control of non-point sources of pollution. Gradually phasing the grants into loans after this reauthorization period would be greatly facilitated by adding a loan program now for control of nonpoint sources.

We believe it is absolutely crucial that this committee find a means for funding this program, or it will simply not work and the hard work which has gone into it will be for naught.

In regard to Federal consistency and coordination, we know that there are many Federal agencies which conduct activities that can cause severe nonpoint pollution problems. We believe it is unfair to tell States that they must clean up while the Federal Government does not have its own house in order. We believe the Federal Government has an independent responsibility for ensure that its activities do not exacerbate already serious nonpoint pollution problems, whether or not a state controlled program is in effect.

Senator CHAFEE. Do you want to wind it up, Ms. Reeves?

Ms. REEVES. Thank you. We have mention in here of citizen suits and we urge the committee to amend section 505 of the act to allow suits, not only against EPA but against other governmental units.

I thank you for your attendance. We will be following the progress of this. Thank you very much.

Senator CHAFEE. Thank you very much.

Mr. Sampson.

STATEMENT OF R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT, FORESTRY ASSOCIATION, WASHINGTON, DC

Mr. SAMPSON. Thank you, Mr. Chairman, I am Neil Sampson, executive vice president of the American Forestry Association. We are a private, nonprofit conservation organization.

I would like to limit my remarks to the nonpoint source pollution section today. First of all, I commend the chairman for including section 112 in S. 53. We think that it contains language that was worked out with a great deal of effort during the last year and a half and represents an important step forward in our effort to manage nonpoint sources of pollution.

It also represents a significant departure from the way this committee has historically addressed many of the important pollution problems facing the Nation. We think that, too, is a strength because it recognizes the uniquely different nature of the non-point problem and the fact that we face, rather than technical difficulty, a great deal of institutional difficulty in properly addressing this situation.

Technically, we know a great deal about how to prevent non-point pollution. Now, that is not to say that technical problems don't remain. But largely our problem is that we are not doing nearly well enough with what we know how to do, in either of the agricultural or forest industry sectors where my experience is most extensive.

The challenge we face is to help people understand what is needed, why it is needed, how it is feasible and how to go about it. Perhaps the greatest gain from moving forward aggressively with a program such as is outlined in S. 53 would be the development of new institutional arrangements. These new efforts at the local level will result in not only learning how to do things institutionally but will also help a great deal in developing of technical skills.

Based on this, we support section 112, S. 53 as an excellent legislative approach. And I would like to talk about of the issues that we think are important.

It is been a frustration with any one who has worked at the State and local level, to see Federal efforts and projects ride roughshod over local plans. One arm of the Federal Government can require the State or local government to do something and another arm of the Federal Government can come in and prevent that action it by their activities.

We have also seen efforts to make Federal agencies consistent in some absolute sense with State and local plans or programs, and that doesn't work either. Subsection 112(a)(1)(G) creates an intergovernmental communications process based on existing law and practice that may be the best and most feasible option that we have today. I commend the committee and support it very strongly.

Subsection 112(b) also addresses the difficult question of how to respond to the State that chooses to do little or nothing. This has been a frustration that we have faced through the years.

It seems to me there is one point to start from, however. In non-point sources, as in few of the other pollution issues, the Federal Government simply cannot feasibly design, enforce and implement a non-point pollution control program at the local, individual, farmer, rancher, or forester level.

If you take that limitation as a given, then the threat, to step in and do the job with Federal intervention if the State doesn't do it is an idle threat. It is recognized as such, and is not constructive.

So, it seems to me that what you have done is to use the only strategies open to the Federal Government: communication, negotiation, and persuasion. I don't think we should delude ourselves that S. 53, as now constructed, is a final answer to those States which are not doing what needs to be done in controlling nonpoint sources. But it is a start.

It will encourage good States to do better. It will encourage States with modest programs to consider improving them. It will set up a great national panoply of examples, which can be used by the public sector, the media, and in public organizations to bring political pressure on those States that are not doing what they need to do. Over the long run, that is going to be more constructive then starting out on something that is recognized as not do-able at the outset.

Finally, I would like to address the issue of public funding through this program for cost sharing to individuals. This committee has been very reluctant to allow any of the funding under this program to be used for cost sharing to individuals. As now constituted, S. 53 would allow that only in the instances where demonstration projects are involved.

Those of us who have worked in the agricultural sector have come to the conclusion that some sort of economic incentive is needed. That doesn't have to come out of this bill, but it has to come from somewhere.

One thing that we need to understand is who may do it and who may not. I would say to you today that the USDA Soil and Water Conservation Programs are not the place to look for funds for water pollution control.

If you have seen President Reagan's budget lately, you know that there are not many of those funds left in it. Even if there were a better budget, or even if Congress decides to put those dollars back, USDA is very tightly strapped for funds.

They are going to use their funds for their top priorities. Water quality comes about third or fourth on their priority list and simply doesn't make the cut. So it is not realistic to look to USDA programs for the incentive funds that are going to be necessary to make nonpoint water pollution control work.

Today 24 States are appropriating State funds for cost sharing programs to do either soil erosion control or water quality work. That is a new trend, a laudable trend. There is some room left to add more States and more money in the States that are now doing it.

So my appeal to you is that if you do retain the limitation on funding in terms of cost sharing to individuals in this bill, make it completely clear in the committee's hearing record, if not in the bill, that those funds which the States raise for cost sharing are eligible as matching funds for any of the money that may come through this program.

Let's at least give them the incentive to raise and spend their own money to help out with this program.

Mr. Chairman, it is a pleasure to come before you today on this particular bill. We have worked on it on the idea of implementing non-point sources now for a decade. We think the institutional framework is out there to move forward, but it is fragile. It needs encouragement. It needs it now. We appreciate a chance to support your efforts on this important matter.

Senator CHAFEE. Thank you all very much. Let me ask you a question. There seems to be a difference between what Ms. Babcock said and what Ms. Reeves said about the use of the construction grants money for nonpoint source pollution control.

As I understand you, Ms. Babcock, you said have a set aside of 20 percent that you could use from the construction grants money for nonpoint source.

Ms. BABCOCK. You mean a full 20 percent? I was just referring to the discretionary fund that could be opened up for use for nonpoint source program implementation. It was that category discretionary funds.

Senator **Chafee**. Category?

Ms. **Babcock**. That's correct. I would also add the alternative innovative technologies category of moneys that might be available.

In other words, I think we have to look around to see what is available today.

Senator **Chafee**. Is that 4 percent, too?

Ms. **Babcock**. Well, again that is roughly the number, the percentage of the entire fund that is—as I understand it—allocated to the innovative and alternative technology category of discretionary funds.

It was just, frankly, a note to myself to remember what quantities, what percentages, we were talking about. But not necessarily the whole percentage, not the whole 4 percent, or 20 percent in every instance.

Senator **Chafee**. I thought Ms. Reeves went so far as to say that the States should be able to use any of the construction grants moneys. Is that right?

Ms. **Reeves**. We did not set a percentage figure. We assumed that the committee would be looking at that as to what the amount should be. But we believe there is need for flexibility as we go about the business of going and meeting our water quality standards. In some areas nonpoint sources will be the things which will prevent the meeting of water quality standards.

In those areas, it may not be good to be putting that much more money into Construction Grants Program if the thing that is going to get us to meet the goal is nonpoint sources control. But we did not set aside nor ask that the law—we believe there should be some flexibility.

Senator **Chafee**. Each of you seemed to indicate that we ought to press the States into doing more in nonpoint source pollution control. This is a ticklish area. This gets into land use planning and we have had that struggle up here.

There is talk about use of a carrot and a stick. How can you use a stick on the States to do something? This is, as you know, a very jealously guarded area. Ms. Babcock, what do you say?

Ms. **Babcock**. We would agree with the chairman's assessment of the situation in the States. I think Mr. Sampson described it very well as well. We have a fragile program that is moving out there at different rates of speed in different States.

And what we particularly like about the proposed program that appears in the bill today is that it recognizes the fragility of the progress to date and recognizes that States will be moving at different rates and acknowledges that, in fact, some States may not participate in this program at all and that that fact serves to form some kind of a record, some kind of a data base, that we can then look at when we look at this program again.

How many States did participate? What did different States do? This program will start a process of something happening out there, and I happen to think happening in more States than are presently doing anything in regard to nonpoint sources right now.

I think the analogy that I was trying to develop was—as Ms. Reeves was talking—is that it is kind of like making a cake. If we have some difference here, it may be that the National Audubon Society has determined that not so many eggs should be broken at this point but we can still get a pretty good cake on the table.

I think we are all talking about the strongest nonpoint source program we can possibly achieve and the differences, where there are differences, are over what that is at this point in time.

Senator **Chafee**. Mr. Sampson, I thought the points that Ms. Babcock made about fresh ground water as a nonpoint source pollution problem, sometimes come in conflict. Getting back to how to get the States to participate, how would you suggest encouraging more?

Mr. **Sampson**. The thrust of my testimony was that the bill, as now constituted, will, in fact, do that, even though in a subtle manner.

The notion that the Federal Government will, in those States that take no action to comply, go out and identify areas of water where nonpoint sources will, in fact, be needed to be controlled in order to meet water quality standards is subtle, but it is doable.

And it also contains the possibility for a great deal of public and political attention to the situation. This is going to have a more laudatory effect than trying to put a lot of forcing pressures in this bill, given the fact that the States are not going to allow the Federal Government to encroach on that closely held prerogative of land use regulation.

Senator **Chafee**. What do you say, Mayor? Do you have any thoughts on nonpoint source pollution?

Mayor **Douglas**. Well, it certainly is a major problem area and one of the ones in our community that is the toughest for us to tackle. We are in a glacial area for example where soils are thin. We are talking about it now, about blasting through rock to provide sewer service to an area where septic tanks are failing and that is obviously expensive and therefore controversial for those that have to help share the bill.

My proposal would be that the Federal Government make every attempt to work with the States that are willing to take on their responsibility and provide flexibility to the states.

Again, going back to the plan, encourage States to do an adequate planning job and to develop compliance schedules that recognize individual differences of their locales rather than broad Federal policies that are laid on in thick, kind of suffocating layers.

If you gave us, as local governments, some flexibility to meet a national objective, I think you would find some creative responses. Maybe not in 50 States but at least many of them.

Senator **Chafee**. Well, thank you all very much.

This winds up our hearings. We will be going into the markup Thursday. Thank you.

[Whereupon, at 12:37 p.m., the hearing was recessed.]

[Statements submitted for the record follow:]

Statement of Senator Mack Mattingly

MR. CHAIRMAN:

THANK YOU FOR THIS OPPORTUNITY TO APPEAR BRIEFLY TODAY ON SHORT NOTICE. I SIMPLY WANT TO EXPRESS FORMALLY SEVERAL SUGGESTIONS WHICH I BELIEVE ARE CONSTRUCTIVE, POSITIVE EFFORTS IN OUR CURRENT ATTEMPT TO RENEW AND REVITALIZE THE CLEAN WATER ACT AND TO PROMOTE AND ENCOURAGE A CONTINUATION OF THE STATE/FEDERAL PARTNERSHIP WHICH HAS MADE ENCOURAGING STRIDES IN IMPROVING THE QUALITY OF OUR NATION'S AIR AND WATER RESOURCES.

I AM PLEASED WITH THE PROGRESS WE HAVE MADE OVER THE PAST DECADE IN DEALING WITH SOME FAIRLY MONUMENTAL PROBLEMS IN THIS AREA. I FULLY BELIEVE THAT THE CONGRESS, THE AMERICAN PUBLIC, AND THE INDUSTRIAL AND BUSINESS SECTORS OF OUR COMMUNITY ARE BETTER EDUCATED AND MORE MOTIVATED IN FINDING REASONABLE, AFFORDABLE, EFFECTIVE SOLUTIONS WHICH WILL CONTINUE TO MOVE US TOWARD OUR MUTUAL GOAL OF ATTAINING IMPROVEMENT OF THE QUALITY AND SAFETY OF OUR ENVIRONMENT.

MR. CHAIRMAN, I APPLAUD YOUR RECENT EFFORTS AND THE CONTRIBUTIONS MADE BY THE OTHER MEMBERS OF THIS SUBCOMMITTEE IN ADDRESSING THE NEED TO UPDATE AND IMPROVE THESE ELEMENTS OF ENVIRONMENTAL LEGISLATIVE CONCERN.

IN OUR DECADE OF EXPERIENCE WITH NEW INITIATIVES DESIGNED TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF CURRENT AND FUTURE GENERATIONS IN THIS COUNTRY, WE HAVE HAPPILY WITNESSED AN EXPANDED UNDERSTANDING OF THE COMPLEX ENVIRONMENTAL PROBLEMS WHICH THE AGE OF INDUSTRIAL AND TECHNOLOGICAL REVOLUTION HAS THRUST UPON US. WE HAVE ALSO SEEN GRAPHIC DEMONSTRATIONS OF A WILLINGNESS ON THE PART OF MOST IN THE REGULATED COMMUNITY TO SINCERELY STRIVE TO BE GOOD NEIGHBORS--AND CLEAN NEIGHBORS--IN OUR SOCIETY. I KNOW ALL PARTIES WILL READILY ACKNOWLEDGE, HOWEVER, THAT WE STILL FACE MANY CHALLENGES IN THE YEARS AHEAD. I ALSO AM CERTAIN THAT WE WILL SEE A CONTINUATION OF THE GENERAL SPIRIT OF COOPERATION AND MUTUAL INTEREST THAT HAS BEEN THE DISTINGUISHING TRADEMARK OF A VAST MAJORITY OF AMERICA'S BUSINESS AND INDUSTRIAL LEADERS IN ADDRESSING THESE ENVIRONMENTAL CHALLENGES AND GOALS.

WE, AS LEGISLATORS, HAVE COME TO BE MORE AWARE OF THE NEED FOR FLEXIBILITY IN ENCOURAGING CONTINUED EFFORTS BY OUR STATE AND LOCAL GOVERNMENTAL PARTNERS IN FURTHER ENSURING THE ENVIRONMENTAL SAFETY OF OUR CITIZENS. WE IN CONGRESS HAVE LEARNED MUCH--AS HAVE THOSE IN THE REGULATED COMMUNITY AND THE AGENCY PERSONNEL CHARGED WITH RULEMAKING AND ENFORCEMENT--ABOUT WHAT CAN AND SHOULD BE DONE IN THE PURSUIT OF A CLEANER, MORE HEALTHY ENVIRONMENT IN WHICH WE CAN ALL WORK, PROSPER AND RAISE OUR FAMILIES.

I FEEL THAT POSSIBLY THE MOST IMPORTANT ELEMENT IN AN EFFECTIVE SCHEME OF ENVIRONMENTAL PROTECTION AND IMPROVEMENT SHOULD BE THAT ELEMENT OF FLEXIBILITY. HOW DO WE GAIN THE HIGHEST DEGREE OF COMPLIANCE WITH AN EMPHASIS ON MAXIMUM EFFECTIVENESS? I SUGGEST THAT THIS GOAL CAN BE BEST ACHIEVED BY CREATING AN ATMOSPHERE OF EDUCATED CONCERN AND COOPERATION BETWEEN THE REGULATORS AND THE INDIVIDUAL MEMBERS OF THE REGULATED COMMUNITY. AND THOSE IN STATE AND LOCAL GOVERNMENT WHO ARE INDEED OUR PARTNERS IN THIS EFFORT NEED THE ENCOURAGEMENT AND ASSISTANCE WHICH IS INHERENT WITHIN THE FRAMEWORK OF AN ENVIRONMENTAL POLICY WHICH SETS STANDARDS BUT WHICH ALSO ALLOWS FOR MAXIMUM FLEXIBILITY IN DETERMINING JUST HOW TO ATTAIN THOSE STANDARDS.

MR. CHAIRMAN: I RESPECTFULLY SUBMIT FOR CONSIDERATION BY THIS SUBCOMMITTEE SEVERAL AMENDMENTS TO S.53 AND S.652 WHICH I BELEIVE WILL HELP ADVANCE AND EXPEDITE OUR MUTUAL QUEST FOR A VASTLY IMPROVED ENVIRONMENT AND WHICH WILL ALLOW OUR STATE AND LOCAL GOVERNMENTAL PARTNERS A GREATER DEGREE OF AUTHORITY AND FLEXIBILITY TO DEAL WITH PROBLEMS WHICH MAY REQUIRE DIFFERING SOLUTIONS IN DIFFERING CIRCUMSTANCES. I THINK THAT THESE SUGGESTIONS, WHICH HAVE BEEN DEVELOPED BY MANY OF THE RECOGNIZED LEADERS IN THE ENVIRONMENTAL COMMUNITY AND THROUGH THE ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS, FORM THE BASIS FOR CONTINUING THE EXAMINATION OF ALL POSSIBLE APPROACHES IN SEARCH OF FINDING THE BEST APPROACH TO THE ENVIRONMENTAL PROBLEMS WE SEEK TO SOLVE. I URGE YOUR OBJECTIVE CONSIDERATION OF THESE AMENDMENTS AND I KNOW THAT YOU WILL USE YOUR BEST EFFORTS TO FAIRLY RESOLVE THE ISSUES WHICH THEY RAISE.

THANK YOU MR. CHAIRMAN.

Amendments to S.53

Section 106(a) - Specific Numerical Toxic Criteria

Section 107(b) - Alternate Pretreatment Programs

Section 108(a) and (h) - EPA Penalties and Enforcement

Section 112(a) - Non-Point Source Planning

Section (new) - Storm Water

Amendments to S.652

Section 3 - Revolving Fund Installment Payments

Section 3 - State Matching and Repayment

Section 3 - Independent Audits

Congress
Session

S. ....

H. R. ....

IN THE SENATE OF THE UNITED STATES

....

Referred to the Committee on ______________________ and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

(Insert title of bill below)

to S. ____53____, a bill
H.R. ______________, an Act

After Line 17 on Page 15 insert the following:

"(B) Whenever a State reviews water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria for all toxic pollutants listed pursuant to section 307(a)(1) of this Act, the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria may be numerical or narrative criteria for such toxic pollutants and in addition may include criteria based on biological monitoring or assessment methods consistent with information published pursuant to section 304(a)(8). Particular attention shall be given to toxic pollutants which are highly persistent in the environment or are bioaccumulative. Nothing in this section shall be construed to limit or delay the use of effluent limitations or other permit conditions based on or involving biological monitor-

IN THE SENATE OF THE UNITED STATES

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

(Insert title of bill below)

to S. ....53.........., a bill

H.R. ...., an Act

At Line 17 on Page 18 insert "(a)" immediately after "Sec. 107." After Line 11 on Page 19 insert the following:

(b) Section 307(b) of the Clean Water Act is amended by adding a paragraph (5) as follows:

"(5) Nothing in this subsection shall affect any State or local pretreatment requirement which differs from a pretreatment standard established under this subsection if the State or local pretreatment requirement is demonstrated to effectively control the toxic pollutant for which it is established."

.... CONGRESS
...... SESSION

S. ....
H. R. ....

IN THE SENATE OF THE UNITED STATES

....

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....
(Insert title of bill below)
to S. ......53......, a bill
H.R. ...., an Act

After Line 12 on Page 19 insert the following:

Sec. 108. (a) Section 309(d) of the Clean Water Act is amended by striking "$10,000" and inserting in lieu thereof "$25,000", and by adding at the end thereof the sentence: "No State shall be required to modify a permit program approved or submitted under section 402 of the Clean Water Act before July 1, 1986 as a result of the amendment which increased the civil penalty provided by this section to $25,000 per day."

...... Session

S. ....

H. R. ....

IN THE SENATE OF THE UNITED STATES

....

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

to S. ....53........., a bill

H.R. ...., an Act

(Insert title of bill below)

After Line 4 on Page 25 insert the following:

(e) Section 309 of the Clean Water Act is amended by adding a new subsection (h) as follows:

"(h) Whenever a State has proceeded with an enforcement action relating to a violation for which the Administrator is authorized to assess a civil penalty, the Administrator shall refrain from pursuing any action if the State demonstrates to the Administrator that the State relief is appropriate."

...... Session S. ....

H. R. ....

IN THE SENATE OF THE UNITED STATES

....

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

(Insert title of bill below)

to S. 53, a bill

H.R. ...., an Act

After Line 2 on Page 33 insert the following:

"(a) In developing the nonpoint source management program required by this section, information developed pursuant to sections 208, 303(e), 304(f), and 305(b), including the waste treatment management plans developed pursuant to section 208(b), and other information as appropriate, shall fulfill the requirements of this section."

.... CONGRESS
...... SESSION

S. ....
H. R. ....

IN THE SENATE OF THE UNITED STATES

....

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

(Insert title of bill below)

to S. 53, a bill

H.R. ...., an Act

After Line 13 on Page 47 add the following new Section:

STORMWATER DISCHARGE

Sec. ____________. Section 502(14) of the Clean Water Act is amended by adding at the end thereof the sentence: "This term includes stormwater discharges only when such are determined to impair designated water use or when such are contaminated by industrial activities."

.... CONGRESS
...... SESSION

S. ....

H. R. ....

IN THE SENATE OF THE UNITED STATES

....

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

to S. 652, a bill

H.R. ...., an Act

(Insert title of bill below)

"Section 601(e)" of Section 3 of S.652 is amended by striking "quarterly installment".

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

(Insert title of bill below)

to S. ......652......, a bill

H.R. ...., an Act

"Sec. 602(b)" of Section 3 of S. 652 is amended by --

(1) striking "Sec. 602(b)(3)" in its entirety and redesignating other paragraphs accordingly.

(2) striking "Sec. 602(b)(5)(B)" in its entirety and inserting in lieu thereof the following:

> "(B) treatment works projects that are constructed in whole or in part prior to fiscal year, 1995 with funds directly from the State capitalization grants in the State Water Pollution Control Revolving Fund will meet the same requirements applicable to grant projects funded under Title II, and . . ."

(3) adding immediately after paragraph "(5)(C)" the following new paragraph:

> "(D) Funds from repayments of principal and interest shall be returned to the State Water Pollution Control Revolving Fund and may be dedicated to any projects included in the listing of eligible categories (A) through (G) in Section 216. As long as a specific project does not result in noncompliance with the enforceable requirements of this Act, it shall not be required to meet the other requirements of Title II when funded under this paragraph.

.... CONGRESS
...... SESSION

S. ....
H. R. ....

IN THE SENATE OF THE UNITED STATES

Referred to the Committee on .... and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. ....

(Insert title of bill below)

to S. 652, a bill

H.R. ...., an Act

"Section 604(b)" of Section 3 of S.652 is amended by striking "independent" in the first sentence and by striking "by an entity independent of the State, and" in the second sentence.

TESTIMONY OF
FRANCES DUBROWSKI
SENIOR ATTORNEY
NATURAL RESOURCES DEFENSE COUNCIL, INC.
BEFORE THE SENATE SUBCOMMITTEE
ON ENVIRONMENTAL POLLUTION

ON

"THE CLEAN WATER ACT: VARIANCES AND WAIVERS"

MARCH 27, 1985

A. FDF VARIANCES

Mr. Chairman and members of the Subcommittee, it is a pleasure to be invited to testify here today. Since this Subcommittee last considered the Clean Water Act, there have been several significant developments in the national water pollution control program. Prime among them is a close (5-4) decision by the United States Supreme Court in Chemical Manufacturers Association v. Natural Resources Defense Council, Inc., 53 U.S.L.W. 4193 (U.S. Feb. 27, 1985) to allow EPA to grant case-by-case variances from otherwise uniform, national pretreatment standards (and, by analogy, BAT effluent limitations) limiting toxics discharges.

Although there is no statutory authority for variances for toxics, EPA had issued rules authorizing administrative variances for sources claiming "fundamentally different factors" (hence the acronym "FDF") from the sources considered by EPA in setting national standards. The FDF variance allowed EPA to defer questions about the proper level of BAT or pretreatment standards for some sources in an industrial category until after the standard-setting for the bulk of the category.

In 1977, as part of a general effort to strengthen the nation's program for control of toxic water pollutants, Congress took pains to decide when, and under what conditions, sources could obtain variances from toxic pollution control requirements. For example, Congress eliminated the economic hardship variance in Section 301(c) of the 1972 law -- at least for toxics. Likewise, Congress created, in Section 301(g), a new water quality "safety valve" for BAT limitations, again prohibiting its use for toxics. Finally, Congress enacted Section 301(l) of the Act which said:

"The Administrator may not modify any [pretreatment or BAT standard] as it applies to any specific pollutant which is on the toxic pollutant list...."

Congress did not qualify the latter prohibition and then-Senator Muskie, in explaining the 1977 Amendments to the Act, stressed that, with respect to toxic pollutants, "there are no waivers or modifications."[1] The Senate Report also emphasized that "modifications to BAT are intended for non-toxic ... pollutants[2] only, [and hence] the bill prohibits variances for [toxic] pollutants."[3]

EPA nonetheless argued that the statute's ban on variances applied only to the variances Congress had created (namely, those Sections 301(c) and 301(g) allow on economic and water quality grounds), not to the variances created by EPA. A majority of the Court accepted this argument, though they acknowledged that the word "modify" broadly read would preclude FDF variances. But the majority found the word "modify" ambiguous; a strict reading of it would, they reasoned, prevent EPA from correcting rulemaking errors or imposing more stringent requirements as control technology advanced. In addition, the majority found the legislative history on the House side ambiguous.

---

[1] A Legislative History of the Clean Water Act of 1977, Cong. Research Service, Comm. Print No. 14, 95th Cong., 2d Sess. 458 (1978).

[2] The Senate Report also referred to conventional pollutants, but this variance was deleted in conference in favor of "best conventional pollution control" requirements.

[3] 1977 Legis. Hist., supra, at 677.

The dissent by Justices Marshall, O'Connor, Blackmun, and Stevens, on the other hand, thought Section 301(l) quite clear and criticized the Court's decision for "validat(ing) outcomes substantially less protective of the environment" than Congress intended. Slip Opinion, p. 4.

The Court, of course, expressly declined to reach the question of whether or not, as a policy matter, FDF variances are either useful or appropriate in a national program to control toxic water pollution. That is a decision appropriately left to Congress.

We submit that the same considerations which led this Committee to state, in 1977, that variances were inappropriate for toxics pertain with even more force today. FDF variances present five major problems:

1. The FDF variance produces weaker standards than categorical rulemaking.
2. The FDF variance interferes with the Act's technology-forcing goal.
3. The FDF variance unduly delays final decisions on pollution control requirements.
4. The FDF variance wastes agency resources.
5. EPA's handling of FDF variances has been demonstrably inept.

We consider each of these concerns below.

1. Weaker, less uniform standards.

The FDF variance is less protective of the environment than standard-setting during rulemaking because the variance focuses only on a single industrial user. It does not ascertain whether there are any other similarly situated dischargers in the same category. As Justice Marshall's dissent points out, "a scheme in which the initial screening is done by the individual States, at times determined by when the variance application is filed, is unlikely to lead to the identification of new subcategories." Slip Opinion, p. 22. Hence, the FDF variance produces weaker standards. The dissenting opinion in Chemical Manufacturers, supra, shows how:

"If for example, a discharger shows that its production processes - and, as a result, its costs of compliance - are significantly different from those taken into account in setting the categorical standards, that discharger would be eligible for an FDF variance ... [and, hence, a less stringent standard]." It may turn out, however, that there are many other dischargers in the same situation, and that all of these dischargers use production processes that make pollution control possible at a much lower cost. If EPA took into account the production processes of these more efficient dischargers -- as it presumably would have to do if it proceeded through rulemaking on a categorical scale -- it would set a requirement far more stringent than that adopted as part of the FDF variance mechanism." Slip Opinion, pp. 22-23.

Likewise, if a variance required more stringent controls at a particular facility (there have never been any such variance requests, though EPA maintains that variances for more stringent standards are at least theoretically possible), the FDF variance does not require EPA to decide whether to order other sources to upgrade to the level of this "best performer." In either case, the FDF variance shortchanges the environment.

2. Less advanced pollution control technology.

The FDF variance has no place in a scheme designed to spur technological innovation. That is because it allows some sources to escape "best performance levels" for reasons that have nothing to do with what technology can achieve. It stands to reason that some sources in an industrial category may have to make more significant advancements in their level of pollution control than others, especially where little thought or attention has previously been devoted to pollution control. These dirtier plants may well incur costs, energy requirements, or process disruptions wholly out of proportion to others. Without an FDF variance, dischargers with environmentally unsound production processes would be compelled to purchase new technology or make process changes to meet a standard set by reference to the "best" discharger in their industrial category. With an FDF variance, they might not need to do so. The long-term implications are clear: the FDF variance will relax demand for new technology and therefore remove incentives for technological innovation. That is why Congress repeatedly admonished EPA to set technology-based standards across broad industrial cateories, rather than plant-by-plant, in the first place.

EPA has encountered dramatic evidence that its program works better without an FDF variance. Under EPA's FDF variance rule, for example, General Motors filed variance applications for 27 of its electrolating facilities, all indirect dischargers. Eighteen of these applications sought extensions of the Act's three year compliance deadline for pretreatment standards. When the U.S. Court of Appeals for the Third Circuit struck down the variance, these GM plants faced a compliance deadline only 9 months away. Using a variety of pollution control devices, GM brought 19 of these plants into timely compliance, according to the information it submitted to EPA. The remaining 8 signed up to a compliance schedule in consent decrees entered with the district courts. Had GM been able to pursue an FDF variance, it would have lacked the incentive to devise measures to bring these 19 plants into compliance.

3. Inordinate delay.

Third, and critical to the success of the regulatory scheme, is the all-important question of timing. Congress has always insisted that BAT and pretreatment controls for toxics be installed as quickly as reasonably possible. It therefore set compliance deadlines not more than three years from the date EPA promulgates a standard. If sources are to meet this timetable, they have to embark, shortly after promulgation, on all the steps necessary to attain compliance -- preliminary engineering, obtaining bids, awarding construction contracts, purchasing major equipment components, construction, trial operation, performance testing, and fine-tuning. The advanced technology required by these standards is, after all, hardly an off-the-shelf consumer item.

An FDF variance is antithetical to this timetable. FDF variance applicants must wait close to a year in the best of circumstances -- considerably more on the average -- to know their pollution control obligations.[4] Many may be reluctant to embark on a multi-million dollar pollution control program without a final decision from EPA on their pollution control obligations. While they delay, their discharges go unabated. Nothing could be more at odds with the prompt, comprehensive control Congress had in mind.

4. Inefficient use of agency resources.

The FDF variance is a Rube Goldberg contraption. It is extraordinarily wasteful of agency resources. It may entail review by as many as four separate tiers of government,[5] an informal public comment period, a hearing, and coordination between EPA's rulemaking experts and diffuse state and regional office personnel -- all of which occurs after the pollution control standards for a source have purportedly already been defined in a general rulemaking proceeding. (See the procedures described in footnote 4, above.)

---

[4] EPA's FDF variance rules for indirect dischargers outline the following minimal procedures: 180 days from the effective date of the standard (longer if a "category determination request" is made) to apply for a variance; an unspecified amount of time for the agency to review the application, set the administrative machinery in motion, and notify the public that an application is pending; at least 30 days for public comment on the application; and an unspecified amount of time for either the State or the EPA regional enforcement division director to weigh the public comments and decide the request. If the request is denied, the following additional procedures may be invoked: 30 days to request a hearing from the Regional Administrator, some again unspecified time for the Regional Administrator to review the enforcement division director's decision and determine whether to hold a hearing, 30 days to appeal to the Administrator (apparently only if the hearing request is denied), additional time for the hearing itself, and an unspecified amount of time for either the Regional Administrator or the Administrator to render a decision. 40 C.F.R. 401.13(g) and (j) to (m).

[5] An application for an indirect discharger is reviewed by the state, the EPA Enforcement Division Director, the EPA Regional Administrator and the EPA Administrator. 40 C.F.R. 403.13.

EPA defends each of these layers of review plausibly. Because the compliance deadline is running, says EPA, a variance cannot be granted without the involvement of state and regional enforcement personnel. Likewise, if the statute's uniformity is to be preserved, headquarters personnel must serve as a check on decisions made in the field. Otherwise, sources may end up with very different pollution control requirements based on their location and, hence, who reviews their variance application.

These simplistic arguments sidestep the central issue: is there a better alternative? There undoubtedly is.

It is far more efficient to decide whether plants are different or similar to the rest of an industrial category during, not after, a rulemaking. During the rulemaking the standard-setters can frame the options for decision when the data base is still fresh before them. After the rulemaking, EPA procedures require participation of a much wider group of state and regional personnel, most of whom are totally unfamiliar with the rulemaking record.

EPA has estimated that processing a single variance request will "triple the resource requirements for each permit," even without considering the resources needed to defend the agency's decision in court. A significant member of variance requests, EPA admits, will "upset permitting priorities and [EPA's] ability to reduce the backlog of expired industrial permits."[6]

Elsewhere, EPA continually decries its lack of resources to do the job Congress ordered. It is, for example, years behind statutory rulemaking deadlines, including deadlines for critical BAT rules such as that for organic chemical manufacturers. About 41% of the outstanding NPDES permits have expired without reissuance. EPA estimates that there is "massive noncompliance" with pretreatment requirements, but EPA does not even have the resources to review pretreatment monitoring reports (BMRs). Against this background, it makes no sense to construct standard-setting procedures which fritter away EPA's all-too-scarce resources.

5. EPA's track record on variances.

The only track record the agency has compiled on FDF variances occurs in the BPT context. EPA's performance on BPT variance applications is, quite simply, dismal. EPA received 58 applications. Most lacked merit: EPA approved only 4; 31 more were denied or withdrawn.

More salient, however, is the fact that EPA gets paralyzed by variance requests. Indeed, once a plant files an application, it enters a regulatory limbo. Of 23 applications still pending, 9 -- or roughly 40% -- predate 1980. Six date to 1976 and

---

[6] Memo dated Feb. 3, 1982 from the Acting Director, Office of Water Enforcement and Permits, to the Acting Assistant Administrator for Water.

1977. As long as EPA demurs, some applicants are willing to gamble on a favorable outcome and postpone expenditures for pollution controls. True, they are still subject -- at least theoretically -- to enforcement actions, but EPA's enforcement activity has not kept pace with need, as this Committee well knows. Understaffed enforcement personnel are reluctant to sue sources whose pollution control obligations may change before an enforcement action is complete. In short, companies which postpone control expenditures while they sit out variance proceedings gain a competitive edge over those who pay to install, operate, and maintain controls. Congress should redress this inequity.

EPA nonetheless argues that it needs an FDF variance for two reasons: 1) it may not consider, or even receive, all relevant information during a rulemaking, and 2) it may have to delay issuing future standards if it cannot rely on the FDF variance as a safety valve.

Neither argument withstands analysis. EPA's first argument is simply a fig leaf for inadequate agency rulemaking. EPA should consider all relevant information in a rulemaking; if it does not, it runs the risk that its rules will be overturned as arbitrary and capricious. See, e.g., Portland Cement Assn. v. Ruckelshaus, 486 F.2d 375, 393 (D.C. Cir. 1973), cert. denied 417 U.S. 921 (1974), reh. denied, 423 U.S. 1092 (1976). The weight of each rulemaking comment turns on its validity, not on whether it is supported by few or many sources. Hence, it is far safer for EPA to be careful during, not after, a rulemaking.

If, on the other hand, the problem stems from industry's failure to bring relevant information to EPA's attention during a rulemaking, the FDF variance is not a cure. To the contrary, it exacerbates the problem. The variance gives industry an incentive to treat the rulemaking more casually. Without the variance, industry must come forward with all relevant information during a rulemaking. Where it fails to do so, the courts will not entertain a challenge to the rule. The variance, however, gives industry a second bite at the apple. There is no plausible policy reason for a second round of rulemaking. There are, as we noted earlier, strong environmental and management reasons for resolving technology requirements in the initial rulemaking.

Second, EPA raises the spectre that, without the safety valve of an FDF variance, future BAT and pretreatment standards will languish while EPA decides the fate of a few atypical plants. This is pure hyperbole. After the Third Circuit invalidated the FDF variance for indirect dischargers, EPA issued at least six final[7] and four proposed [8] pretreatment standards.

---

[7] 48 Fed. Reg. 49126-49171 (Oct. 24, 1983) (aluminum forming); 48 Fed. Reg. 49808-49831 (Oct. 27, 1983) (pharmaceutical manufacturing); 48 Fed. Reg. 52380-52400 (Nov. 17, 1983) (coil coating); 48 Fed. Reg. 55690-55705 (Dec. 14, 1983) (electrical and electronic components); 49 Fed. Reg. 8742-8831 (Mar. 8, 1984) (nonferrous metals manufacturing); 49 Fed. Reg. 9108-9152 (Mar. 9, 1984) (battery manufacturing).

[8] 48 Fed. Reg. 49408-49436 (Oct. 25, 1983) (inorganic chemicals manufacturing); 49 Fed. Reg. 5862-5883 (Feb. 15, 1984) (plastics molding); 49 Fed. Reg. 8112-8182 (Mar. 5, 1984) (nonferrous metals and iron and steel/copper/aluminum metal power production and powder metallurgy); 49 Fed. Reg. 26352-26483 (June 27, 1984) (nonferrous metals manufacturing).

All were issued on or about the agency's deadline (i.e., the date established in the Consent Decree).[9] Since EPA has apparently had no problem issuing rules in the absence of an FDF variance, there is no reason to believe it will develop a problem in the future. EPA has not, for example, had a problem issuing either new source performance standards or new source pretreatment standards, yet neither are eligible for an FDF variance.

Few dischargers -- either direct or indirect -- have thus far tried to avail themselves of the FDF variance. Incorporating the concerns of all plants in a national rulemaking will not, therefore, significantly burden EPA. It will not even add a new feature to EPA rulemaking; to the contrary, EPA already routinely considers unique features of individual plants in rulemaking for both direct and indirect dischargers. Indeed, requests to establish separate subcategories for one or a few plants which are somehow "different" from others in the same industrial category are a common feature of these rulemakings.

Eliminating the FDF variance simply closes off another avenue for raising the same concerns. It frees EPA to concentrate its resources on rulemaking, rather than dispersing them throughout variance proceedings and litigation over variance applications. In short, it produces a better and fairer environmental result. We therefore urge this Committee to modify Section 301(l) to prohibit FDF variances.

---

[9] Administrator Ruckelshaus signed all of the above-referenced standards within a month of the Consent Decree deadline and all but two within a week of the deadline. The standards appeared in the Federal Register shortly thereafter.

B. WATER QUALITY VARIANCES (Section 301(g))

Much of what we have said with respect to FDF variances pertains equally to other variances, in particular, the water quality variance in Section 301(g) of the law. In 1977, Congress adopted Section 301(g) to give flexibility to BAT limitations for nontoxic pollutants. The variance was part of a comprehensive scheme to classify pollutants according to their danger to the environment and, hence, to concentrate the nation's resources on the worst pollution problems.

Congress specifically designated the most pernicious, well-known pollutants as "toxics." Industries discharging these pollutants had to meet strict BAT standards. They were not eligible for variances because Congress recognized that EPA would not have sufficient data to decide a "safe" level of discharge with respect to them.

By contrast, Congress designated less dangerous pollutants -- such as suspended solids, biological oxygen demand, and pH -- as "conventional" pollutants. Industries discharging these substances had to install "best conventional technology," a requirement potentially less stringent than BAT. Because they shouldered a lower pollution control burden, these sources were not eligible for variances either.

Finally, dischargers of less well-known pollutants (sometimes referred to as "nontoxic, nonconventional" pollutants) had to meet BAT effluent limitations. Individual sources could nonetheless obtain a variance for these allegedly "nontoxic" pollutants if they could show:

1. compliance with applicable BPT limits and water quality standards;
2. that a variance would not result in additional requirements on any other point or nonpoint source; and
3. that a variance would not have an adverse water quality impact.

Of course, Congress's directive to EPA to review and, if necessary, revise the list of toxic pollutants on an ongoing basis was integral to the statutory scheme. Indeed, Congress simplified the procedures necessary to "list" a toxic pollutant precisely to facilitate this objective.

EPA, however, ignored Congress's directive to update the toxics list. In fact, since 1977, despite a growing body of scientific literature on a host of chemicals, EPA has never added a pollutant to the toxics list. (It has deleted three). As a result, many pollutants now known or suspected of causing serious adverse health and environmental consequences, including pollutants whose use is severely restricted under other statutes, are not on the list.

Nowhere is this discrepancy more apparent than with respect to the pesticides industry. EPA's proposed BAT effluent limitation for the pesticides industrial category tentatively identifies limits for 143 pesticide contaminants. Only 10 of these are on the toxics list. The remaining 133 include at least 14 pesticides mistakenly registered, in significant part, on the basis of now-suspect IBT data. They include: ametryne, atrazine, barban, captan, chloropropham, dicamba, dinoseb, ethion, glyphosate, methomyl, naled, prometon, simazine, and terbufos. EPA has yet to review or, in some cases, even receive replacement studies for each of these pesticides. Thus, EPA still lacks adequate data on such critical questions as: can any of these pesticides cause cancer? birth defects? damage the nervous system? inflict chronic illness?

The same data gaps exist with respect to many pesticides not affected by IBT testing deficiencies. Approximately 578 pesticides were registered before the current pre-market testing requirements in FIFRA took effect. EPA does not expect to reregister the majority of these pesticides before the mid-1990's. Even those pesticides registered under current FIFRA requirements have not necessarily been subject to adequate health effects testing because of waiver provisions in that law. In fact, the National Academy of Science has concluded that only 10% of the registered pesticides and inert ingredients of pesticide formulations have been accompanied by enough test data to determine the true hazard to human health alone.[10] In short, EPA does not have the data to make the "no adverse water quality impact" findings required by Section 301(g).

We emphasize that our concern is not simply limited to missing data; for many pesticides, existing data illustrates the potential for serious health and environmental consequences. For example, other pesticides not yet on the toxics list but targeted in EPA's BAT effluent limitation include:

o DBCP, banned by EPA for virtually all uses except on Hawaiian pineapples because it causes sterility in males and has been shown in laboratory testing to cause mutations and cancer.

---

[10] "Toxicity Testing: Strategies to Determine Needs and Priorities," March 1984.

o Alachlor, shown in recent studies to cause at least four types of tumors in animals, banned for aerial spraying and use on potatoes, subject to recently promulgated occupational safety and labelling restrictions, and now under review as a potential carcinogen which might have to be totally banned.

o Dicofol, under special, expedited regulatory review to determine whether it should be removed from use altogether because it was found to contain the infamous toxic DDT.

o Linuron, also under special, expedited regulatory review as a potential carcinogen.

These pollutants cannot simply be dismissed as "nontoxic." Section 301(g) would have EPA decide, on a case-by-case analysis of individual sources and stream segments, whether any particular pesticide discharge, alone or in combination with other pollutants, poses a danger to human health, public water supplies, fish and wildlife, or the environment. This task is enormous -- and well beyond the agency's capabilities.

EPA has thus far received 76 Section 301(g) variance applications, primarily from iron and steel and steam electric plants. Headquarters EPA has acted on only one. In that case, EPA took almost a year and a half to determine that indirect sources could not apply for 301(g) variances. That was a purely legal decision (now pending for review in the U.S. Court of Appeals for the Third Circuit, Koppers Co. v. EPA, No. 84-3701).

The factual decisions involved in processing substantive 301(g) applications are infinitely more complex -- more complex even than the technological and economic evaluations EPA has handled so tortoise-like in the FDF context. To review Weirton Steel's application alone, EPA had to assemble a special Task Force of scientists, engineers, and lawyers -- a resource-intensive effort that would be difficult to duplicate often.

In short, continued adherence to the 301(g) variance process will result in significant delays in the final definition of pollution control requirements for many sources, an inefficient use of agency resources, and the danger that, under pressure, EPA will make decisions which pose a significant risk to the environment.

For these reasons, we are pleased to see that both S. 652 and the Administration's bill propose to curtail the availability of 301(g) variances.

S. 652 would do so by giving safe harbor to all applications completed by January 3, 1985, provided the Administrator makes a tentative decision on the application by the date of enactment of the 1985 amendments. This has the benefit of precluding future applications and the resulting delays in defining pollution control requirements. It does, however, put the agency under considerable pressure to act on pending applications by enactment of these amendments (and still requires the agency to defend its actions in court), without addressing whether this is a wise use of agency resources given other competing priorities.

The Administration, on the other hand, proposes to limit the eligible pollutants to a list of five, to be revised whenever the Administrator determines that satisfactory test methods and data are available to support revision of the list. This is a far less preferable solution than S. 652. It may discourage some variance applicants, but it is difficult to see how it will adequately reduce the demands on EPA to process 301(g) applications (or, in the alternative, petitions to revise the list of eligible pollutants). Instead, EPA will still expend significant scientific, technical, and legal resources making the necessary administrative decisions and defending them in court.

Consequently, we urge the Committee to adopt the alternative proposed by S. 652, modified so as to eliminate the safe harbor clause. We also urge the Committee to address whether similar restrictions should be placed on Section 301(c) economic variances. As these variances require EPA to assess "reasonable further progress" toward the elimination of the discharge of pollutants, they pose many of the same problems as Section 301(g) variances.

C. PRETREATMENT WAIVERS

We are pleased to see that neither S. 652 nor S. [illegible] contain a "local waiver" or "local opt-out" provision. Local waiver proposals discussed last year would have allowed some POTWs to obtain exemptions from the national pretreatment program. Industrial users of these POTWs, in turn, would no longer have to comply with national categorical pretreatment standards; they would be bound only by locally developed limits on their discharges.

In previous testimony to this Committee we outlined the dangers of a local waiver provision: it is administratively unworkable, it is extremely resource-consumptive, it will delay pollution controls at POTWs which do not qualify for the waiver, and, because we lack adequate water quality and sludge data, it may dispense with pollution controls on industrial users which ultimately prove to need them.

In addition, when we last testified we noted that a local waiver provision would disrupt the pretreatment program just at the time that rules which had taken over a decade to develop were being implemented. At that time, however, only about 100 POTWs had obtained EPA's approval for local pretreatment programs in accordance with EPA's regulations. Now, over 766 -- or roughly 50% -- of the 1530 POTWs required to develop a local program have done so. Many more have submitted partial or complete applications awaiting EPA's decision. In other words, cities have made significant progress in pretreatment in the past two years. This argues for the wisdom of not disrupting the program at this late stage in its development.

In addition, the Pretreatment Implementation Review Task Force, a 17 member group composed of representatives from industry, environmental organizations, states, cities, and EPA regional offices, has completed its year long assessment of the pretreatment program. The Task Force Report, released by the Administrator only last week, contains approximately 75 pages of recommendations (largely consensus recommendations) for improving this program without statutory change. The report:

- suggests changes EPA can take to simplify or clarify program requirements;

- emphasizes the need for strong and consistent enforcement of program requirements;
- delineates the roles and responsibilities of each of the three different levels of government, -- EPA, states, and cities, -- and cautions EPA to adhere to these roles so as to achieve a working partnership among all levels of government responsible for the administration of this program;
- stresses the need for additional resources at all levels of government; and
- identifies regulatory changes to improve program coverage, reduce confusion, and eliminate red tape.

We are confident that, if EPA follows these recommendations, the program can work much more smoothly than it has in the past.

Not all of the developments on the pretreatment front, however, represent good news. The Pretreatment Task Force Report notes that EPA has currently assigned, on average, approximately three persons per Regional Office to pretreatment implementation. The Task Force recommends instead that "EPA should either obtain additional appropriations or reallocate resources to dedicate at the Regional Offices an additional 150 person years of effort to the pretreatment program." Information which EPA submitted to the Senate Appropriations Committee after the Task Force developed this recommendation suggests that the Task Force estimate of needed resources may be unduly conservative. EPA, however, steadfastly refuses to increase its budget requests for this program. If the program is to work to the satisfaction of industry, the states, the cities, and the public, EPA cannot continue to budget for it at its current "drop in the bucket" level. We solicit the Committee's assistance in the upcoming appropriations process to ensure that EPA gets the resources it needs to make this program work.

CMA

CHEMICAL MANUFACTURERS ASSOCIATION

STATEMENT OF
CHARLES D. MALLOCH
MONSANTO COMPANY

ON BEHALF OF THE
CHEMICAL MANUFACTURERS ASSOCIATION
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
ON
POSSIBLE AMENDMENTS TO THE CLEAN WATER ACT
MARCH 28, 1985

40-386 848

2501 M Street, NW • Washington, DC 20037 • Telephone 202/887-1100 • Telex 89617 (CMA WSH)

EXECUTIVE SUMMARY

The quality of our Nation's waters has improved tremendously since the early 1970's. The Chemical Manufacturers Association (CMA) believes that the requirements of the Clean Water Act have played a large role in bringing about this improvement. Some adjustments to the Act are necessary, however. Our views on Clean Water Act amendments are as follows:

- Deadlines for compliance. The Act currently requires compliance with BAT and BCT effluent limitations by July 1, 1984. CMA supports an extension of this deadline to three years and six months after the date on which effluent limitations guidelines are promulgated. This would allow EPA and the states time to incorporate effluent limitations guidelines into permits (six months), and would give industry sufficient time after issuance of these permits to design and construct treatment facilities to meet the new limitations (three years).

- Administrative penalties. CMA believes that EPA does not need the authority to issue administrative penalties in order to adequately enforce the Act. If Congress decides nonetheless to authorize such penalties, it should ensure that alleged violators receive the procedural protections afforded by an Administrative Procedure Act hearing and should provide that a source owner or operator would not be subject both to an administrative penalty and to a citizen suit on the same violations.

- Criminal penalties. CMA supports the imposition of criminal penalties for serious violations of the Act which threaten public health or the environment. Section 108 of S. 53, however, is far broader than necessary to address that type of problem. It is also so vague that a discharger cannot know what actions may subject it to criminal liability. If such a provision is nonetheless adopted, Congress should provide that a discharger would not be criminally liable if its discharge complied with all applicable Federal, state and local requirements.

- NPDES permit term. Congress should extend the term of NPDES permits to ten years. This would reduce the burden on permitting authorities, which have been unable to issue permits in a timely fashion, and would aid industry by increasing stability in permit compliance planning. Such permits should not be required to be reopened during their term except to incorporate more stringent toxic effluent standards under Section 307(a) of the Act.

- "Fundamentally different factors" variances. The U.S. Supreme Court recently upheld EPA's authority under the Clean Water Act to grant "fundamentally different factors" (FDF) variances. Congress should resist any efforts to overturn the Supreme Court's decision. As the Supreme Court stated, the FDF variance procedure is a "sensible variance mechanism." It enables EPA to set regulations in a more expeditious manner than otherwise, and ensures equitable treatment for the small number of unique plants which EPA does not consider in the rulemaking process and which would be unfairly treated as a result.

- Anti-backsliding. Prior to the issuance of effluent limitations guidelines, EPA establishes permit limits on a case-by-case "best professional judgment" (BPJ) basis. If subsequently issued guidelines for an industry are less stringent than the BPJ limits in a discharger's permit, the discharger should be able to have its permit modified to conform to the guideline limits. This would ensure that all plants in an industry are treated equally and fairly and that the issuance of permits and the installation of treatment technology would not be delayed.

- Post-BAT requirements. Congress should not at this time develop a program for post-BAT requirements. Such a program is both premature and unnecessary. Instead, Congress should direct EPA to perform a study of the quality of the Nation's waters after the implementation of BAT to assess what additional controls on point source discharges, if any, are necessary.

- Pretreatment. The pretreatment program has centered on national technology-based pretreatment standards that do not effectively implement the water quality goals of the Act. CMA supports an amendment to the Act that would allow qualified POTWs to establish and implement local pretreatment programs in lieu of the national categorical pretreatment standards.

- Section 301(g) variances. Section 301(g) of the Act authorizes EPA to issue a variance from BAT requirements for a nonconventional pollutant if the variance will not adversely affect water quality. This variance procedure should be retained. It is an appropriate device to avoid "treatment for treatment's sake" and does not impede in any way the achievement of the water quality goals of the Act.

- Non-point sources. CMA supports the efforts of Congress to address the problem of non-point source pollution. Non-point sources are significant contributors of pollutants to our Nation's waters. The magnitude and nature of the non-point problem should be thoroughly examined, and controls should then be imposed on non-point sources as needed to meet water quality standards.

My name is Charles D. Malloch. I am Director, Regulatory Management of the Environmental Policy Staff of Monsanto Company. Today I am testifying on behalf of the Chemical Manufacturers Association (CMA) on possible amendments to the Clean Water Act. CMA is a nonprofit trade association whose members represent more than 90 percent of the production capacity of basic industrial chemicals in the United States. CMA members are directly and significantly affected by the requirements of the Clean Water Act (CWA or "the Act"), and we are thus vitally interested in possible amendments to the Act.

There has been considerable improvement in the quality of our Nation's waters since the early 1970's. The installation by American industry of equipment to control pollutant discharges has played a significant role in this improvement.[1/] This equipment has brought about substantial reductions in the discharge of conventional pollutants, such as suspended solids,[2/] and in the discharge of the toxic or

---

[1/] Through the end of 1982, the chemical industry had expended over $11 billion for the construction, operation and maintenance of water pollution control facilities. Bureau of Census, U.S. Department of Commerce, Annual Reports of Pollution Abatement Costs and Expenditures.

[2/] *See* June 14, 1983 Testimony of William D. Ruckelshaus Before the Senate Subcommittee on Environmental Pollution, Committee on Environment and Public Works; *see also* "Possible Amendments to the Federal Water Pollution Control Act," Hearings Before the Subcomm. on Water Resources of the House Comm. on Public Works and Transp., 97th Cong., 2d Sess. 12 (1982) (hereafter "1982 House Hearings").

priority pollutants.[3] We urge Congress to consider any proposed amendments to the Act in light of this progress that has been made to date in cleaning up the Nation's waters.

I. DEADLINES FOR COMPLIANCE WITH TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Section 104 of S. 53 would extend the deadlines for compliance with technology-based discharge limitations. These extensions are necessary in light of the delays that EPA has experienced in promulgating the effluent limitations guidelines on which such limits are based.

Section 301(b) of the CWA generally requires compliance by July 1, 1984, with "best available technology" (BAT) effluent limitations for toxic pollutants and with "best conventional pollutant control technology" (BCT) effluent limitations for conventional pollutants.[4] When this deadline was established, Congress believed that EPA could issue effluent limitations guidelines promptly, implement the guidelines in National Pollutant Discharge Elimination System (NPDES) permits, and still allow sufficient time (3-3½ years) for industry to install treatment systems to achieve compliance with the limits. This date became unreasonable when EPA was unable to promulgate effluent limitations guidelines for many industry categories in a timely fashion. Indeed, EPA still has not promulgated guidelines for at least six major industry categories, including the organic chemicals industry.[5/]

---

[3] 1982 House Hearings at 12-14; Engineering Science, Inc., "CMA/EPA Five-Plant Study" (April 1982).

[4] For BAT limitations on nonconventional pollutants, compliance is required no later than three years after such limitations are established, or July 1, 1984, whichever is later, but in no case later than July 1, 1987.

Section 104 of S. 53 would extend deadlines for complying with BCT and BAT limitations to three years after the date such limitations are established, but in no case later than July 1, 1987. While we agree with the general philosophy behind this extension, we believe that a July 1, 1987 deadline is inappropriate.

The July 1, 1987 deadline was first proposed in 1983; it is now outdated. As noted, EPA still has not promulgated guidelines for at least six major industry categories. For those industry categories, as well as for the two categories whose guidelines were issued after July 1, 1984,[6/] the July 1, 1987 date would provide less than three years to come into compliance with the guidelines. This is not only unfair

---

5/ These six categories are: 1) organic chemicals and plastics and synthetic fibers, 2) offshore oil and gas industry, 3) foundries, 4) nonferrous metals (phase II), 5) nonferrous metals forming, and 6) pesticides. See Environmental Protection Agency: Regulatory Agenda, 49 Fed. Reg. 42132 (Oct. 22, 1984).

6/ These categories are: 1) inorganic chemicals (phase II), 49 Fed. Reg. 33402 (Aug. 22, 1984), and 2) plastics molding and forming, 49 Fed. Reg. 49026 (Dec. 17, 1984).

to those affected industrial categories, it also may impose requirements that cannot be met. For example, EPA does not expect to promulgate guidelines for the organic chemicals and plastics and synthetic fibers industries until 1986. Under the Senate bill, these industries would have eighteen months or less to comply with the guidelines. This may not allow sufficient time for the regulated plants to ascertain what additional equipment is needed, order the equipment, and install and begin reliably to operate the equipment.

CMA recommends that Congress require compliance with BCT and BAT effluent limitations three years and six months after the promulgation date of the guidelines on which such limits are based. This would give both the permit-issuing agencies and industry adequate time to perform their tasks; EPA and the states would need approximately six months to incorporate the limits into NPDES permits, and industry would need approximately three years to meet the limits.

If a facility must comply with more than one set of effluent limitations guidelines, the compliance date for BCT and BAT should be not later than three years and six months after promulgation of the last applicable guideline. This would enable plants to design their treatment systems when they know all of the limitations that must be met. Otherwise, a discharger may design and install a treatment system to meet one limitation, only to find out that a subsequently-issued limitation requires the use of another entirely different, or even inconsistent, treatment system.

CMA's recommended deadline -- three years and six months after issuance of effluent limitations guidelines -- also should apply to compliance with new BPT requirements. For several industries, including the organic chemicals industry, EPA's original BPT regulations were withdrawn and have yet to be reissued. Therefore, when EPA issues the final BAT and BCT limitations, it will also issue final BPT limitations. Congress should allow three years and six months to comply with new BPT limitations _if_ these limitations require a level of control substantially greater or are based upon fundamentally different technology than the BPT limits established under previous NPDES permits.

Congress should also provide a specific deadline for compliance with permit limits which are established in the absence of promulgated effluent limitations guidelines -- so-called "best professional judgment" (BPJ) limits. A discharger should be required to comply with these limits within three years from the date that the limits are established in the permit.

Finally, we note that S. 53 fails to address Section 301(k) of the Act, which provides for an extension of a compliance date to allow for the use of innovative technology. The present deadline in Section 301(k) is July 1, 1987, which is three years from the July 1, 1984 deadline for BAT and BCT.

If this provision is to continue to have vitality, its deadline should be extended to three years beyond the new deadline Congress establishes for BCT and BAT and should vary with guideline promulgation. Further, this provision should be extended to indirect dischargers; this is needed to provide the same incentives for development of innovative technology for indirect dischargers as Section 301(k) now provides for direct dischargers.

II. ADMINISTRATIVE PENALTIES

Section 108 of S. 53 would authorize EPA to impose administrative penalties for violations of the Clean Water Act. CMA opposes the addition of such a new system of penalties to the Act. There has been no demonstrated need for administrative penalties; the judicial mechanism is adequate to ensure compliance with the Act.

Many violations of the Clean Water Act are technical in nature and unavoidable. EPA's effluent limitations guidelines are designed by the Agency to be achievable either 95 or 99 percent of the time by exemplary treatment systems over an extended operating period. Thus, the Agency expects a certain number of violations to occur, even at exemplary plants.[7] Under the existing enforcement provisions of the Act, monetary penalties for such violations may be imposed only by a court.[8/] This requires enforcement personnel to consider carefully the merits of any particular case, and to make judgments about which alleged violations are sufficiently serious to pursue. Under an administrative penalty scheme, however, EPA would not have to go to court to impose a penalty. The incentive for the Agency to exercise discretion and judgment would be lost.

---

[7] See 47 Fed. Reg. 54015-16 (Nov. 30, 1982).

The proposed administrative penalty provision also raises substantial questions of fairness. There is no requirement that the penalties be imposed by a neutral fact finder, or that the source owner or operator be accorded any of the protections of the Administrative Procedure Act.[9/]

If Congress decides nonetheless to adopt the proposed administrative penalty provision, it should clarify the provision in the following ways: (1) Administrative penalties should be used only for clear and well-documented violations of the Act. (2) Administrative penalties should not be authorized for violations which EPA expected to occur when it set the applicable guidelines. (3) An alleged violator

---

[8/] EPA has not been reluctant to use its enforcement authority under § 309 of the Act. As for administrative convenience, many of these § 309 actions are settled without need for lengthy proceedings.

[9/] The bill provides that an alleged violator would be given notice and an opportunity for a hearing, but the hearing, if allowed, would not be subject to the procedural protections of the Administrative Procedure Act. Although subsection (5) of

(footnote continues)

should be given the procedural protections of an Administrative Procedure Act hearing, including an impartial hearing officer, as well as the right to subpoena witnesses and evidence for the penalty hearing. (4) If an administrative penalty is assessed, the source owner or operator should not be subject to a citizen suit on the same violations.

III. CRIMINAL PENALTIES

Section 108 of S. 53 would increase the criminal penalties under the Clean Water Act and greatly expand the scope of the criminal penalties provision. We understand that this new provision is directed toward Congressional concern with "midnight dumpers" into municipal sewers. CMA believes that criminal penalties are appropriate for serious offenses which threaten public health or the environment. However, the proposed bill is far broader than needed to address that type of situation. This broad scope may result in a responsible source owner or operator being held criminally liable for routine discharges which were allowed by applicable permits and regulations.

(footnote con't)

§ 309(g) would give EPA the authority to issue subpoenas for such hearings, it is unclear whether the alleged violator would have any means of having such a subpoena issued.

A. Penalties for Discharges to Sewer Systems or Publicly Owned Treatment Works

Section 108 would make it a criminal offense to discharge negligently or knowingly into a sewer system or a publicly owned treatment works (POTW) pollutants or hazardous substances which cause or may reasonably be anticipated to cause personal injury or property damage, or which cause a violation of the POTW's NPDES permit.

There are two main problems with the new criminal penalty provision: it is unduly vague, and it makes a source owner/operator criminally liable for discharges which violate this vague test regardless of whether applicable permits or regulations explicitly allow the source to make that discharge.

An example of the lack of clarity in the provision is the phrase "may reasonably be anticipated to cause" personal injury or property damage. To prohibit conduct which "may" cause a particular result sets no clear standard by which the regulated entity can judge the legality of its actions. The source owner or operator must determine for himself whether discharging a pollutant or hazardous substance -- even if a permitted discharge -- will later subject him to criminal liability because EPA and a Federal judge decide that the discharge had a potential for causing harm that he should have known about. This liability would attach even if no harm actually occurred, as long as the court decides that the harm should have been expected. The only course that the owner or operator can follow to be certain of complying with the law is to refrain from discharging anything into a sewer, even if such a discharge is authorized by regulation.[10/]

As a general rule, a criminal statute must be drafted so as to give those whose conduct is to be regulated fair notice of what is prohibited and to keep within reasonable bounds the discretion afforded the government in enforcing the statute. The fair notice requirement is satisfied only if the law is clear to "men of common intelligence," Connally v. General Constr. Co., 269 U.S. 385 (1926), or, if the statute would normally suggest the need for legal advice, its meaning can reasonably be determined through such advice. Where a criminal law is so vague as to fail this test, it is void under the due process clause of the Fifth Amendment. Id. The "may reasonably be anticipated to cause" test, therefore, could be unconstitutional. Moreover, it opens up a virtually uncontrollable area of discretion for law enforcement with the concomitant risk that enforcement will be arbitrary and capricious.

Another vague provision is the phrase "sewer system." That phrase is nowhere defined in the bill. In

---

10/ In a case which dealt with a similar question, the Supreme Court struck down on vagueness grounds a Pennsylvania statute requiring doctors performing abortions to follow

(footnote continues)

fact, it appears unnecessary, given the broad definition of "treatment works" in Section 212 of the Act. Does the inclusion of "sewer systems" in the bill mean that a source owner/operator could be liable for discharges to a plant's own internal sewer system? This is another example of an ambiguous phrase which is not readily susceptible to interpretation by those who might be subject to the law.[11/]

If Congress is concerned about "midnight dumping" problems, it should adopt a more carefully drawn provision which addresses those particular concerns. Congress should not enact a broad, ill-defined provision that would unwittingly encompass other activities that do not warrant criminal sanctions.

If Congress nevertheless adopts a criminal penalty provision along the lines of S. 53, it should ensure that the

---

(footnote con't)

certain procedures where there is "sufficient reason to believe that the fetus may be viable." Colautti v. Franklin, 439 U.S. 380 (1979). The Court there found the quoted language ambiguous for the very reason that it could have been read to subject the doctor to criminal penalties on the basis of the after-the-fact judgment of third parties.

[11/] CMA is also concerned with the definition of a "hazardous substance" in the EPA proposal. The definition is redundant since the term "pollutant" is already broadly defined by the Act. There is also great potential here for overlapping enforcement authority under the various statutes to which the definition refers. We believe the definition should be deleted as unnecessary.

provision includes as an affirmative defense that the discharge into a sewer system or POTW was in compliance with all applicable Federal, state and local requirements. Without such an affirmative defense, a discharger could be convicted and sent to prison for a discharge which was allowed by all applicable regulations but which a court later decides the discharger should have expected to cause harm. This would be the case even if no harm actually resulted but the court decides that harm should have been expected.

B. Violations of Pretreatment Programs

Section 108 would also make it a felony to violate "any requirement imposed in a pretreatment program approved under Section 402(b)(8)" of the Act. It is unclear what is intended by this provision. Section 402(b) of the Act contains NPDES permit requirements applicable to POTWs, and subsection 402(b)(8) requires permits for POTWs to include a program to assure compliance with pretreatment standards. If the felony provision is intended only to cover federal categorical standards, it is redundant since violations of Section 307(b) of the Act are already punishable. If the proposal intends to make it a federal crime to violate local pretreatment requirements, this is inappropriate. Congress made local controls the province of the POTW, and expressly decided not to require permits for industrial users of POTWs.[12] CMA believes that local pretreatment requirements should be enforced by state and municipal authorities and not by the federal government.

IV. NPDES PERMIT TERM

CMA supports the proposal to extend the term of most NPDES permits from five to ten years. The issuance of longer permits would reduce the regulatory burden on EPA and the states in processing permit applications. A longer permit term would also increase stability in compliance planning and would help to ensure that treatment technology installed by industry at great expense will not be made obsolete shortly after it has been installed.

However, we do not agree with the "mandatory reopener" provision which accompanies the proposed permit term expansion in S. 53. This provision requires that a permit be reopened and modified whenever new or revised effluent limitations guidelines, water quality standards and other regulations are issued that would result in limitations that are more stringent than existing permit requirements or that control pollutants not limited in the permit. Such a broad, mandatory reopener requirement would take away most of the benefits afforded by a 10-year permit. EPA and the states would be faced with the burden of reopening and modifying enormous numbers of permits once a new, applicable requirement were issued, even if the regulatory change were insignificant. Industry would lose any stability in compliance planning, since new requirements could be imposed at any time during the permit term.

---

[12] Conf. Rep. No. 1236, 92d Cong., 2d Sess. 130 (1972).

Thus, while CMA strongly endorses extending the term of NPDES permits to ten years, such an extension should not be accompanied by a mandatory reopener provision. There is simply no need for such a provision. Section 402(k) of the Act and EPA's existing regulations already require permits to be reopened to incorporate Section 307(a) toxic effluent standards necessary to protect human health. EPA's regulations also provide that a permit may be reopened whenever new information (other than new regulations) or changed circumstances make modification of the permit appropriate. Moreover, the permitting authority is always free to impose more stringent limits when a permit is reissued. S. 53's broad reopener provision would remove the permitting agency's discretion to decide when to impose new limits on a discharger. Instead it would require the permit to be modified promptly to incorporate a new, more stringent requirement, regardless of the nature of the new requirement or the time remaining until permit reissuance.

If Congress believes it is necessary to provide for a reopener provision, it should conform the reopener to EPA's existing regulations, which require permits to be reopened only to incorporate new or modified toxic effluent standards under Section 307(a) of the Act that are more stringent than the requirements in a permit. This would protect human health and the environment, while still ensuring regulatory efficiency and stability in compliance planning.

V. FUNDAMENTALLY DIFFERENT FACTORS VARIANCES

The United States Supreme Court recently upheld EPA's authority to grant "fundamentally different factors" (FDF) variances under the Clean Water Act in a case entitled Chemical Manufacturers Association v. Natural Resources Defense Council, Inc. The Supreme Court upheld the position advanced by EPA and CMA that Section 301(l) of the Act was not intended to bar so-called FDF variances for toxic pollutants. The court also described the FDF procedure as a "sensible variance mechanism."[13] Congress should resist any efforts to overturn the Supreme Court decision.

The FDF procedure has been a key feature of the national effluent guidelines program since its inception.[14] The availability of an FDF determination is essential to allow EPA to develop national guidelines for typical facilities in an expeditious fashion, while allowing the consideration of plants with atypical features to be addressed separately. As the Supreme Court said, the FDF procedure "makes bearable the enormous burden faced by EPA in promulgating categories of sources and setting effluent limitations."[15/]

---

[13] Slip op. at 17.

[14] E.I. du Pont de Nemours & Co. v. Train, 430 U.S. 112, 128 (1977); 40 C.F.R. §§ 125.30, 403.13.

To obtain an FDF variance, a facility must show that it is different from those considered in establishing the national regulations, and that compliance with the national regulations would result in excessive costs or adverse non-water quality impacts. The plant that receives an FDF variance from a BAT-level standard is not "exempt" from BAT, but will be given an individual BAT limit based on the statutory factors in Section 304(b) of the Act. As the Supreme Court held, the FDF determination is not a modification procedure which is precluded for toxics under Section 301(l) of the Act, but instead is an alternate procedure for determining the applicable technology-based limitations for a facility.

The FDF procedure is a "limited safety valve" which is important to both EPA and industry. It enables EPA to set regulations more quickly, and serves to insulate those regulations from legal attack on the ground that some unique plant was not considered in the rulemaking process. For industry, it provides an opportunity for equitable treatment of that small number of atypical plants which cannot be considered in developing regulations and which are unfairly handicapped as a

---

[15/] Slip op. at 15.

result. Congress should resist any effort to restrict or prohibit the FDF device, which the Supreme Court termed a "laudable corrective mechanism."[16]

VI. ANTI-BACKSLIDING

Section 114 of S. 53 limits the circumstances under which a "best professional judgment" (BPJ) permit limit may be modified to conform to a subsequent, less stringent effluent limitations guideline. CMA believes that this proposal could create serious inequities in the Act's regulatory program.

BPJ permits are based upon the judgment of a single permit writer, in the absence of applicable regulations, regarding what is BPT, BCT or BAT for an industry. EPA's effluent limitations guidelines for the same industry are based on years of detailed evaluation by EPA and comments by interested parties. Effluent limitations guidelines are thus based upon considerably more data and analysis. If the effluent limitations guidelines establish less stringent limits than the BPJ limits in a permit, the permittee should be allowed to have the permit reopened to incorporate the guideline limits. This would be consistent with Congress' original intent: BPJ limits are supposed to be employed only as temporary, stop-gap measures to keep the permit program moving in the absence of promulgated effluent limitations guidelines. BPJ limits were not intended to serve as permanent control requirements.[17]

---

[16] Slip op. at 13.

If such permit modification is not allowed, permittees who accept BPJ limits will be at a disadvantage with respect to their competitors who did not receive BPJ permits and who thus will be subject to less stringent limits based upon the promulgated effluent limitations guidelines. The possibility that effluent limitations guidelines may be less stringent than proposed BPJ limits in a draft permit will create an incentive for permit applicants to contest draft permits and to delay permit issuance until final effluent limitations guidelines are issued. This of course will delay the installation of treatment technology, contrary to the goals of the CWA.

The Senate should therefore delete Section 114 of S. 53.

VII. POST-BAT REQUIREMENTS

Section 106 of S. 53 establishes a complicated new procedure for establishing water quality-based, "post-BAT" effluent limitations. Each state must identify within two years those waters within the state that, due to discharges of toxic pollutants, cannot reasonably be anticipated to attain or maintain state water quality standards after implementation of BAT. Within two years after identifying such waters, the states must establish for individual point sources effluent limitations adequate to attain water quality standards, taking into account non-point source contributions. This provision is neither necessary nor appropriate at this time.

---

[17] See Conf. Rep. No. 92-94, 92d Cong., 2d Sess. 126 (1972), reprinted in House Committee on Public Works, 93d Cong., 1st Sess., A Legislative History of the Water Pollution Control Act Amendments of 1972, Vol. 1 at 813.

EPA is still in the process of promulgating BAT effluent limitations guidelines for major segments of American industry. Final promulgation of all BAT effluent limitations guidelines will not be completed until some time in 1986. It will then generally take about three years and six months for permit limits to be established and for the technology necessary to meet the guidelines to be designed, installed and operational.[18/] Any designation of waters that fail to meet water quality standards should be deferred until BAT technology has been installed. Only then will it be possible to ascertain with any certainty what additional controls on point sources beyond BAT, if any, are necessary to meet water quality standards.

Even if there were a determined need for post-BAT controls on point sources, Section 106 would not be needed to accomplish this result. Both EPA and the states already have

---

[18/] *See* Section I above, at pp. 2-6.

the authority to impose such controls.[19] Former Administrator Ruckelshaus has termed post-BAT amendments "neither necessary nor desirable."[20] If additional controls on point sources, beyond BAT, become necessary in order for water quality standards to be attained, EPA and the states have full authority to fashion appropriate requirements.

Instead of enacting legislation to address post-BAT concerns before BAT has even been implemented nationally, Congress should direct EPA to gather necessary data on the quality of our Nation's waters to determine what problems, if any, remain and the source of those problems. The inadequacy of the data necessary to assess the quality of our Nation's waters has been a long-standing problem. The lack of data was recognized in 1976 by the National Commission on Water Quality,[21] and has been noted by EPA on several occasions since then.[22] CMA believes that the time has come to address this fundamental problem head on.

---

[19] EPA has this authority under Section 302 of the Act. The states retain authority, under Section 511 of the Act, to adopt requirements more stringent than those established by EPA (such as BAT guidelines). These requirements would include controls needed for attainment of water quality standards.

[20] Letter from William D. Ruckelshaus to the Honorable Robert H. Michel, Office of the Minority Leader, U.S. House of Representatives, dated June 5, 1984 at p. 2.

[21] Final Report of the National Commission on Water Quality, H. Doc. No. 94-418, 94th Cong., 2d Sess. 10, 31-32 (1976).

[22] United States Environmental Protection Agency, Office of Research and Development, No. 600/8-80-003 at 243; 1982 House

(footnote continues)

Certain provisions of the Act already require EPA to undertake studies to assess the quality of the Nation's waters. Section 104(a) of the Act requires EPA to conduct investigations concerning the pollution of any navigable waters and establish a water quality surveillance system. Section 305 requires states to prepare reports biennially describing the water quality of all navigable waters and EPA to submit such reports, together with an analysis of them, to Congress. These provisions have not, however, produced the required data. Congress should strengthen these provisions by describing more fully what data are to be included in the reports and by providing adequate funding for the studies. Alternatively, Congress should adopt a wholly new provision requiring EPA to undertake a comprehensive analysis of the quality of our waters, taking into account attainable uses of those waters as designated by the states. In particular, EPA should be required to obtain reliable and analytically sound data on the amount of pollutants still present in our waters, the effect of such pollutants, and their sources. Only when such data have been compiled and analyzed can Congress intelligently decide what point source controls beyond BAT, if any, are necessary.

(footnote con't)

Hearings at 104. See also, Environmental Resources Management, Inc., "Priority Pollutant Data on Receiving Streams of the United States," Final Report for Chemical Manufacturers Association (June 1982).

VIII. LOCAL CONTROL OF THE PRETREATMENT PROGRAM

The current program for regulating industrial discharges to publicly owned treatment works consists of national technology-based pretreatment standards. However, the application of uniform EPA categorical pretreatment standards will not appreciably reduce water quality violations where they exist.[23/] Moreover, the mixture of industrial and other discharges to POTWs varies so widely that any water quality problems that exist can better be controlled at the state and local level.[24/] Accordingly, the CWA should be amended to allow qualified POTWs the opportunity to implement local programs in lieu of the federal categorical standards.

A. The Need for Alternative Local Programs

Section 307(b) of the Act authorizes EPA to establish national pretreatment standards for pollutants that interfere with the operation of POTWs or pass through untreated. EPA has developed an elaborate and cumbersome pretreatment program to implement this provision. The most onerous aspect of this program involves the promulgation of national technology-based pretreatment standards applicable to

---

[23/] JRB Associates, Inc., "Assessment of the Impact of Industrial Discharges on Publicly Owned Treatment Works" (Nov. 20, 1981) at Table 4-3.

[24/] *Id.* at 4-1.

industrial dischargers of toxic and nonconventional pollutants. Typically, these "categorical" pretreatment standards have been identical to BAT effluent limitations guidelines applicable to direct dischargers. In the development of these standards, EPA has given inadequate consideration to the amount of interference with the operation of POTWs and the extent to which municipal treatment systems effectively remove pollutants.[25/] Meeting such standards will therefore inevitably require expenditures by industry for treatment that substantially duplicates treatment by most POTWs.

One example of this potential for redundant treatment is found in EPA's proposed pretreatment standards for the organic chemicals industry.[26/] While EPA has not specified the treatment technology necessary to meet the standards, the data on which EPA relies to support the proposed standards are based entirely upon treatment available by biological systems -- the identical treatment employed by most POTWs. To meet the pretreatment standards, industrial dischargers may be required to duplicate the very treatment provided by these POTWs.

To alleviate this problem of redundant treatment, Congress in 1977 provided for modifications of national

---

25/ Current EPA policy requires imposition of BAT-level pretreatment standards whenever BAT treatment would remove more than typical POTWs even where POTW removals are at very high levels. (*See* 48 *Fed*. *Reg*. 11841 (Mar. 21, 1983)).

26/ 48 *Fed*. *Reg*. 11828 (Mar. 21, 1983).

categorical pretreatment standards to reflect pollutant removals achieved by POTWs. EPA has implemented this provision in regulations that allow POTWs to apply for so-called "removal credits," but the regulations are quite complex and restrictive, so that as a practical matter credits may not be widely available. Without credits, industrial dischargers will be required to install expensive treatment technology to meet pretreatment limits even though the POTW may remove all of most of certain pollutants in the dischargers' effluents.[27/]

We believe that the pretreatment program can be strengthened by directing attention to the particular problems of interference and pass through identified in Section 307(b) of the Act, and by placing principal responsibility for pretreatment requirements on the municipalities and states involved. A lengthy report prepared in 1981 by EPA's contractor, JRB Associates, concludes that such a targeted approach would be most effective.[28/] Similarly, a 1980 House Oversight Report recommended that steps be taken immediately to allow municipal treatment authorities to implement their

---

27/ Data from municipal treatment plant monitoring show that POTW secondary treatment is extremely effective at removing toxic organics. "Fate of Priority Pollutants in Publicly Owned Treatment Works," (EPA-440/1-82/303) (Sept. 1982). This is consistent with the Five-Plant Study results discussed above at p. 1.

28/ JRB Associates, Inc., "Assessment of the Impacts of Industrial Discharges on Publicly Owned Treatment Works" (Nov. 20, 1981).

own pretreatment programs, including local pretreatment standards.[29]

B. Alternative Local Programs

CMA believes that Congress should allow the implementation of local pretreatment programs in lieu of EPA categorical standards where the municipalities have the capability to develop and enforce such programs. In order to qualify for local authority, a POTW would have to develop and implement a local pretreatment program to control industrial dischargers as necessary to avoid interference with its operations and pass through of pollutants. Each POTW would bear the responsibility to address any particular problems confronting its treatment system. In addition, the POTW would have to be either achieving secondary treatment or be on a schedule of compliance. The POTW would of course have to show that it has adequate funding and other resources to implement its local program.

POTWs currently are required to obtain an NPDES permit from EPA or an approved state. That permit should assure that the POTW meets secondary treatment as well as water quality standards. In addition, a POTW must assure that its sludge meets applicable requirements. The POTW is in the best position to determine what pretreatment standards are necessary in order to solve local compliance problems and protect the integrity of the treatment system. Each POTW has a unique situation based on the nature of its treatment system, the influent to that system, and the receiving stream to which it discharges. Rigid national categorical pretreatment standards leave no flexibility to address those unique problems.

---

[29] "Implementation of the Clean Water Act," Subcommittee on Oversight and Review, House Committee on Public Works and Transportation, Comm. Print 96-71, 96th Cong., 2d Sess. 62 (1980).

Congress has spent billions of dollars for central municipal treatment systems through the construction grants program. Industry should not be required to devote additional large amounts of resources for unnecessary and redundant treatment. Instead, industry pretreatment requirements should be established on a local basis by the entity which is in the best position to identify needed controls, namely the local municipal sewage treatment agency. We recognize that some POTWs may not have the inclination or resources to develop a local program, and in those cases the EPA categorical standards would remain as a backup. However, we submit that where a POTW has the authority and resources, a locally-developed pretreatment program is the most effective means for accomplishing the objectives of the Act.

IX. SECTION 301(g) VARIANCES

Section 301(g) of the Act authorizes EPA to issue a variance from BAT requirements for a discharge of a nonconventional pollutant if the applicant can demonstrate that the variance would not adversely affect water quality. Section 8 of S. 652 would eliminate the Section 301(g) variance, with a limited exception for applications filed before January 3, 1985. CMA opposes this amendment; the Section 301(g) procedure is a sensible one and should be retained.

Section 301(g) reflects a Congressional decision made in 1977 to avoid "treatment for treatment's sake" for nonconventional pollutants. BAT requirements are imposed on a technology basis, without respect to the effect of the relevant discharge on water quality. If a discharger can prove that the BAT limitation on a nonconventional pollutant is not needed to protect water quality, Section 301(g) allows him to obtain a less stringent limit, _if_ the new limit will adequately protect water quality. The required showing is a stringent one, and it is unlikely that many Section 301(g) variances will be issued. Further, an applicant for such a variance must still comply with his permit limits until the variance is issued; no delay is allowed during the application period except under very limited circumstances. The Section 301(g) variance mechanism is a sensible procedure which poses no danger to achievement of the water quality goals of the Act. It should not be eliminated.

X. NON-POINT SOURCES

Section 112 of S. 53 deals with the very serious problem of non-point source pollution. CMA supports the efforts of Congress to address this issue. The issue of non-point source pollution should be thoroughly examined and controls should then be adopted on such sources as necessary to protect the quality of the Nation's waters.

As noted earlier, pollution control by industry over the past decade has resulted in major improvements in water quality. In contrast, significant sources of non-point pollution, such as runoff from farms and urban areas, have not yet been effectively controlled.[30/] As a result, we believe that more stringent controls on industry will not result in appreciable gains in water quality. On the other hand, further progress in improving water quality can be made in a comprehensive and effective manner if prompt attention is given to non-point source pollution and its control.

In order to address this issue, the term "non-point source" needs to be clearly defined. The magnitude of the non-point source problem should then be determined through studies and the establishment of a data base for use by Congress and EPA in controlling non-point source pollution. Controls on such non-point sources should then be established when necessary to meet water quality standards.

In addition, non-point source pollution should be taken into account in establishing both water quality

---

30/ See "National Water Quality Goals Cannot Be Attained Without More Attention To Pollution From Diffused Or 'Non-point' Sources," Comptroller General of the United States (Dec. 20, 1977).

standards and discharge limitations on point sources to meet those standards. Contributions of pollutants by non-point sources, and the impact of non-point source controls, should also be considered in developing wasteload allocations.

CONCLUSION

This testimony discusses key areas in which Congress should reevaluate and modify provisions of the Clean Water Act to improve its effectiveness in the coming years. CMA is prepared to cooperate with the Congress to address these issues in a constructive manner.

DRAFT

Testimony regarding possible amendments to the Clean Water Act

James W. Gillett, Ph.D.

My name is James Warren Gillett and I reside in Ithaca, NY, where I am Professor of Ecotoxicology in the Department of Natural Resources at Cornell University. Ecotoxicology is the study of the fate and effects of chemicals in natural ecosystems. For the past 25 years, I have been involved in examining pesticides and other toxic chemicals. After receiving a B.S. in Chemistry at the University of Kansas in 1955, I earned a Ph.D. in Biochemistry at the University of California at Berkeley and then served as post-graduate research chemist in the Physiology/Toxicology Laboratory of the Dept. of Entomology there. Subsequently I was Asst. and Assoc. Professor in the Dept. of Agricultural Chemistry at Oregon State University for a decade, at which point I joined the staff of the Environmental Research Laboratory of the Office of Research and Development of the USEPA in Corvallis, OR., where I served until 1983. Cornell University then created the first ecotoxicology position in the United States and I joined the faculty there working between the Institute of Comparative and Environmental Toxicology and the USEPA-sponsored Ecosystems Research Center. My research has included biochemical and ecological studies of various pesticides and toxics in a wide variety of organisms, largely in terrestrial systems associated with agriculture. In recent years, my efforts have been largely devoted to the development of improved means of assessing exposure and hazard to evaluate the risk of pesticides and toxic substances.

It is in that context that the staff contacted me regarding testimony on the amendment of section 301(g) of the Clean Water Act. The task before you is a complex one, but one to which I believe you may bring more more order than presently is the case.

When Congress created sets of "conventional" and "non-conventional" pollutants and prescribed appropriate technological levels of control for them, a list of "priority pollutants" recognized as toxics was included in the conventional pollutants. The best available technology must be applied to their removal from waste streams.

On the other hand, under section 301(g) waivers can be sought for toxic chemicals in effluents not on that list. Such toxics would include the remainder of chemicals currently in production (approximately 70,000 or so) by a host of industries for which the USEPA has been developing effluent guidelines. Those industries include pesticide manufacturers and many high-volume users of organics and petrochemicals, some chemicals of which are on the list of "conventional" toxics and of which are not.

For almost a decade the regulation of these toxics has fallen under considerations of "conventional" pollutants, which means that they have been regulated in terms of factors such as biological oxygen demand, chemical oxygen demand, color, pH, etc., which have practically nothing to do with the toxicity or other adverse characteristics of these materials. The prima facia irrationality of that lack of distinction in level of control technology has been of serious concern for years. I am not sure of all the implications which this distinction has created, but I do know that regional EPA staffs have been faced with heavy loads of waivers for pollutants which can continue to be emitted while the staff evaluates the waiver. Moreover, there is little to distinguish the materials for which waivers of BAT may be given and those for which BAT must be employed. In the time since the 1977 amendments were enacted, we have gained considerably greater insight into the overall problem and are now in a better position to develop a consistent system.

An examination of the list of "priority pollutants" shows that many, but not all, have considerable potential for serious, adverse effects on human health and the environment. Most of the worst offenders, in an ecotoxicologic sense, identified during the 1970's were included in this list. However, there is a substantial range in toxicity or bioaccumulation potential or any other characteristic which you might use to judge how "bad" these chemicals might be.

On the other hand, we can compose lists of manufactured chemicals, such as pesticides, which have a similar range of characteristics. I have examined lists of several hundred pesticides and high-use chemicals as "non-conventional" pollutants. These chemicals can be highly toxic to fish and other aquatic organisms, affect plant life from algae to vasular plants, or cause serious human health problems. They may bioaccumulate in environmental and human food chains where they may cause chronic problems, a number of which have been documented. In any case, there is no clear distinction between the nature of chemicals which may appear on the list for which a waiver might be granted and the other, for which no waiver is permitted. In a way, it is like having a leash law for lions and bobcats and permitting tigers, leopards, and feral house cats to roam everywhere but downtown, where they may get a waiver if they are well behaved!

The chemical mirex is a good example of the problem such an arbitrary division creates. Mirex is a pesticide closely related to another pesticide, kepone, which you may recall was involved in the very serious situation along the James River in Hopewell, VA. Mirex, under the name dechlorane, is also manufactured as a truck tire flame retardent, and it is probably this latter use which has resulted in it being a significant contaminant of fisheries in the Great Lakes and St. Lawrence Seaway. The distinctions between kepone and mirex are trivial regarding toxicity or environmental fate. Ironically, mirex may be converted to kepone in the environment, but it would be possible to obtain a waiver from BAT for the former. This puts us in the confusing situation, to extend the analogy, of having a leash law for mountain lions, but not pumas (which, as you know, are the same species).

One could easily make many similar comparisons which illustrate the untenable nature of the present position. Clearly, the two separate lists should be merged, at least as far as pesticides are concerned. One alternative would be to remove the "priority pollutants" from the list of "conventionals" and return them to the "nonconventional" list. That would be a retrogressive step, which you in your wisdom, hopefully, would not permit.

The other alternative would be to remove any waiver process. That would certainly be a step in the right direction, and I am pleased to see the proposed amendment to that effect. It would amalgamate related problematic chemicals for which the present regulatory mechanisms are inadequate. It would also remove certain problems from the forefront of consideration, such as synergism (greater than addditive reaction) in mixed effluents from different sources and the additive effects of several similar dischargers on a given ambient standard.

Many chemicals including a number of pesticides do not survive standard secondary treatment with adapted, activated sewage sludge. A number of chemicals may be volatilized out of an aeration lagoon and not enter water. Finally, the chemical may be released at concentrations well below those causing a toxic effect or their persistance in the environment may be so low as to avoid toxic outcomes. Such factors enter into present waiver processes, but the detailed knowledge necessary for judgement is often lacking. Either the explicit data are absent, or the evaluative context of the data has gaps.

Without entering into technical policy areas, such as cost effectiveness or resource diastribution, for which I appreciate the difficulty faced by the Committee, it would seem possible to develop a list of chemicals and mixed effluents which would have characteristics suitable for waiving levels of treatment below BAT at some time in the future if concerted efforts are initiated now. Some of the chemicals presently on the "priority pollutant" list might be candidates, as well as a number of chemicals used as pesticides. In the meantime, a large number of chemicals for which waivers must now be considered (and which may be released until the waiver is denied) would be placed in a much more rational position. Having worked with the Interagency Testing Committee on the prioritization of testing of chemicals now in the market place, I am painfully aware of the severe deficiencies in information presently available about most chemicals.

The most obvious deficiency in data concerns environmental persistance, which will be critical in any waiver process. Someone has to take the responsibility for generating that data in an orderly manner. Industry has demonstrated the capability of addressing this type of problem for pesticides and some toxics, but many chemicals have no proprietary home, so to speak. I would hope that industrial associations could continue to operate jointly and would provide open data on toxic effects and chemical characteristics supporting such a rational approach.

In summary, I strongly urge your considerate approval of the amendment to set aside any distinction between conventional and non-conventional pollutants regarding waivers from BAT until a new set of categories can be established in an orderly and logical manner.

NEDA
CLEAN WATER PROJECT

National Environmental Development Association · 805 Fourteenth Street NW, Washington DC 20005 · 202 638-1230

J. WILLIAM HAUN, Project Chairman

STATEMENT
of
J. Jeffrey Zimmerman
Director of Regulation and Compliance and Counsel for
Environment, Health and Safety for
Occidental Petroleum Corporation
on behalf of the
National Environmental Development Association's
Clean Water Project
before the
Environmental Pollution Subcommittee
of the
Environment and Public Works Committee
United States Senate

March 28, 1985

Good morning, Mr. Chairman and Members of the Subcommittee. I am Jeff Zimmerman, Director of Regulation and Compliance and Counsel for Environment, Health and Safety for the Occidental Petroleum Corporation. I am here today speaking on behalf of the Clean Water Project of the National Environmental Development Association, of which I am the Chairman of the Technical Committee.

Seated behind me today are J. William Haun, Vice President of Engineering Policy for General Mills and Chairman of the NEDA/Water Project, and Jim Sheets, Research Director of the Laborers' International Union of North America.

The NEDA Clean Water Project is a coalition of industry, the Building and Construction Trade Unions of the AFL-CIO and agriculture which seeks to bring balance to policy decisions relating to the Clean Water Act. Our project's members believe it is possible to have both a healthy and clean environment and a strong economy.

We urge the Subcommittee to amend the Clean Water Act this year in order to...

1. ...achieve effective water pollution control;
2. ...accelerate the process of cleaning up the nation's waters; and
3. ...reduce the tangle of red tape which interferes with the above goals and results in undue cost to the public.

We are here to offer recommendations which will strengthen the Act through clarification and simplification.

Today, we will present our project's views on some of the key provisions in S. 53 and S. 652 which affect our membership including: NPDES permit term and reopener, compliance deadlines, criminal penalties, anti-backsliding, nonconventional pollutants and construction grants.

Permit Life

There are approximately 64,000 NPDES permits for point source discharges under the Clean Water Act, 10,500 of which are issued by EPA and 53,000 of which are issued by the states, subject to EPA review. The need for renewal of these permits every five years, or even more frequently in many instances, subjects EPA and the state agencies to substantial administrative burdens. As of March 15, 1985, 25,000 permits (40 percent) are pending for renewal.

This is why many organizations as well as the NEDA Clean Water Project, recommend that the maximum life for NPDES permits be raised from 5 to 10 years. S. 53 recognizes this need by providing for a 10-year permit term.

NEDA/Water and many other organizations, including the Administration, recognize that it is important to provide regulatory relief to unclog the regulatory process by recommending an increase in the maximum permit term.

This provision would provide increased stability in compliance planning and would help insure that EPA utilizes its permitting resources wisely.

An important issue which needs to be addressed is when and under what circumstances these permits may be reopened to incorporate changes in regulations. S. 53 would require that permits be automatically reopened every time a new or modified regulation is issued by EPA. We are concerned that the course S. 53 takes on reopeners may be counterproductive and could in fact increase the regulatory backup that now exists.

The motive for mandatory reopeners is the fear that permits will automatically be issued for a period of 10 years and that there will be no way that a permitting authority will be able to incorporate new requirements if they later prove to be needed. We believe this fear is based on a number of misperceptions.

The first misperception is that permits automatically will be granted for a 10-year period. This is not the case. It is important to understand that this provision would not require permits to have 10-year terms. It merely authorizes permit writers to issue permits for up to 10-years. Permit writers retain the authority — as they have now — to issue shorter-term permits. Many dischargers today have permits with a life span shorter than 5 years. Why? Because the permit writer believes that sometime in the near future new requirements will be developed that he will want to incorporate into the permit.

The second misperception is that permit writers are not able to reopen permits under existing law. This is not the case. Existing EPA regulations already allow the reopening of permits in a number of circumstances. In particular, these regulations provide for permit modifications to incorporate new or revised limitations on toxic pollutants where these limits are more stringent than the existing permit requirements. Permit writers in many states also have exercised discretionary authority to require permit reopening in a broad range of circumstances. Consequently, it is probable that permits can be set for a 10-year period with a wide variety of reopener provisions if the situation warrants and the permit writer determines that such provisions are in the best interest of the environment. Alternatively, if the permit writer and the permittee do not want to incorporate the reopener in the permit, the life of the permit can always be shortened.

These two points illustrate, we believe, that existing regulations and practices already accomplish what S.53 intends -- making sure that permits can be reopened to incorporate new and more stringent requirements.

Requiring mandatory reopeners of the type now incorporated in S. 53 could substantially increase rather than relieve the burdens on permit issuing agencies. With mandatory reopeners, potentially every permit in the national system would automatically need to be dealt with all at once by permit writers, even if there were no environmental consequence of a certain change in the regulations. Such a requirement could quickly surpass tne manpower of EPA and the States to reissue permits every time a new regulation is developed.

It is our belief that the scope of such reopeners should concentrate on the areas of greatest environmental concern such as toxic pollutants and state programs to attain and maintain designated uses for receiving waters.

COMPLIANCE DEADLINES

It is generally understood that there is a serious problem in complying with BAT, BCT and BPT deadlines as set forth in the Act. I do not need to review the history today. Simply stated, industry can't comply immediately with requirements which don't exist or for which it has not had a reasonable time to install pollution control technology to meet limitations which have only recently been promulgated.

EPA's schedule for promulgating effluent guidelines has once again slipped and, if July 1, 1987 is the deadline, there are already several industries which will have less than 36 months in which to comply.

We propose that dischargers be given a uniform period to comply with BAT or BCT requirements after EPA issues the applicable effluent guideline or BPJ limits after they are established in an issued permit. Our experience shows that it takes about this long to design, engineer, construct and make operable these new water pollution control systems.

We are pleased that S. 53 addresses this issue but believe that the July 1, 1987 closing date can disadvantage those who happen to be later in line to receive their effluent guidelines. EPA has not promulgated guidelines for six major industry categories. In addition, two industry categorical guidelines were promulgated after July 1, 1984. The result is that under S. 53 as it is now constructed, these eight categories of industry will have less than 3 years to comply with BAT/BCT limitations.

We would prefer to see an amendment that would allow dischargers 3 years to comply with BAT or BCT after the promulgation of effluent limitations or with BPJ after it is established in an issued permit.

CRIMINAL PENALTIES

Regarding the "Criminal Penalties" section of S. 53, the NEDA/Water Project would like to share with the Subcommittee some concerns over the possible application of the criminal sanctions against indirect dischargers who have complied with all applicable federal, state and local requirements. Federal, state, and local requirements are designed specifically to protect operations of the sewer system and its treatment works. In all cases that we know about, the local sewer ordinances incorporate severe sanctions, including suspension of review, if the discharger is believed to be responsible for damage to or failure of the POTW.

Particularly we would like to highlight for the Subcommittee a problem resulting from possible interpretations of the language in Section 108 (d) of S. 53.

Consider the following situation: An indirect discharger, in compliance with all federal, state and local requirements and permits, is introducing a pollutant or hazardous substance into a sewer system but the treatment works at the end of this sewer system is operating in violation of its NPDES permit.

The indirect discharger in this situation could be subjected to criminal prosecution under the language of Section 108 (d) of S. 53 even though he is doing everything that applicable laws and regulations require of him. In effect, this provision would make the indirect discharger the absolute guarantor, subject to criminal sanctions, that the operations of the POTW stay within the POTW's permit limits.

We believe as a matter of fundamental fairness that an indirect discharger, who is in compliance with all requirements applied to his operations, should not be subject to criminal prosecution because another party, the POTW, violates the requirements that apply to that POTW.

We would recommend that the sewer system elements of this provision either be dropped or that an affirmative defense for compliance with all applicable federal state and local requirements and permits be added to this section of S 53.

ANTIBACKSLIDING

When an NPDES permit is issued to a facility in advance of the promulgation of effluent guidelines applicable to that facility, the permit must contain effluent limitations based on the permit writer's Best Professional Judgment (BPJ) of what BAT/BCT should be for that facility. When the final BAT/BCT guidelines are issued they may be less stringent than the requirements contained in the BPJ permits. When the BPJ permit comes up for modification or renewal one issue that is presented is whether the new permit should incorporate the same requirements as the previous BPT permit or the new less stringent requirements in the BAT/BCT guidelines.

We generally support the concepts on antibacksliding in Section 114 of S. 53. It would require adherence to effluent limitations from the BPJ permit except where a source has been unable to achieve BPJ limits. In this situation S. 53 would allow a modification to the level actually achieved but in no case to a level less stringent than the BAT/BCT effluent limitations.

This is a reasonable approach which adheres to pollutant controls already achieved but allows for flexibility where prior individual engineering judgments of permit writers were overly ambitious.

However, there is one circumstance in which the language of S. 53 could present an unintended constraint on industrial production. Many BPJ permit limitations were not written in concentration or production rate terms and the subsequent BAT/BCT effluent limitations are in these terms. Without some clarification of intent, the provisions of S. 53 could be interpreted to preclude a change from one type of limitation to another.

We would suggest that the Subcommittee not go beyond the provisions in S. 53. A provision going beyond effluent limitation provisions could be considered that would preclude any change to any "conditions" in the prior BPJ permit. Many BPJ permits include special monitoring, reporting study and other requirements that were incorporated on a one-time basis to establish an information base on a permittee's operations. We believe there is no need to perpetuate a condition in a permit where the need for the original condition has been met.

VARIANCE FOR NON-CONVENTIONALS

We are concerned about the proposal in S. 652 that would eliminate the variance that presently exists for non-conventional pollutants in Section 301 (g) of the Clean Water Act.

We understand, Mr. Chairman, that your concern is that several of the so-called nonconventional pollutants are actually having toxic effects on receiving streams. Further, we understand you are concerned that there is very little information on the effects on water quality of most of these pollutants.

We submit that this situation underscores precisely why we should not eliminate the Section 301(g) variance. Under current law and regulations, the burden to demonstrate the absence of toxic effects rests with the applicant. If the pollutant is a toxic pollutant EPA should list it and regulate it as a toxic pollutant. The fact that little may be known about the water quality effects of nonconventional pollutants to us argues for continued flexibility in the regulatory strategy until more knowledge is acquired.

Current law simultaneously provides such flexibility and protection against toxic effects and should be retained.

CONSTRUCTION GRANTS

Mr. Chairman, without doubt, a controversial issue that will be considered by this Subcommittee, the administration and the public is the issue of the level of financial support for the construction of badly needed wastewater treatment facilities.

This committee has already heard from experts in the field regarding the environmental and financial need for publicly owned treatment works. We continue to believe that a minimum of $2.4 billion should be authorized until the program needs already identified by EPA have been met.

The largest single point source of water pollution in this country is municipal treatment works and yet there are even today some areas which do not have wastewater treatment facilities. EPA's latest NEEDS SURVEY suggest that there will be $108.9 billion worth of needed construction by the year 2,000. This figure represents a potential future federal investment of approximately $34.4 bilion.

Mr. Chairman, you, Chairman Stafford and other members of the Committee are to be commended for your commitments to the construction grant program. We are gratified that both S. 53 and S. 652 continue the present level of funding for the program at $2.4 billion.

Clearly, the inability of municipalities to meet their pollution control obligations due to potential decreases in federal construction grant funding creates serious problems, not only in regard to the environment but also with regard to an area's economic health. We are aware of serious problems that are confronting both homes and businesses in some areas of the country because of the inability to build new facilities or add to existing facilities due to a lack of sewer capacity. If a production facility is prohibited from locating in a particular site or expanding an existing facility because of inadequate municipal sewage treatment, the municipality will suffer economic hardship and could lose jobs and tax revenues. Eighty-one thousand jobs are tied to the construction of POTWs and 800,000 people in the construction industry continue to be unemployed. Therefore, we believe that a federal funding program that is both good for the environment and the economy should be supported at a level that meets the needs that have been identified.

We applaud the concept of a revolving loan program that can work in concert with the present construction grant program. Only adequate funding and legislative and program reforms will assure that dollars are spent productively to control the nation's water pollution problem. It is our belief that a construction grant and revolving loan program working in concert over a period of time can provide badly needed funds to build the POTW's that our country's infrastructure will require if the economy is to continue to grow while maintaining our continued commitment to a clean and healthy environment.

0094W

NATIONAL WILDLIFE FEDERATION
1412 Sixteenth Street, N.W., Washington, D.C. 20036 202—797-6800

STATEMENT OF DR. JAY D. HAIR
EXECUTIVE VICE PRESIDENT, NATIONAL WILDLIFE FEDERATION
ON THE
REAUTHORIZATION OF THE CLEAN WATER ACT
BEFORE THE
SENATE ENVIRONMENTAL POLLUTION SUBCOMMITTEE

March 28, 1985

Mr. Chairman and members of the Committee, I am Jay D. Hair, Executive Vice-President of the National Wildlife Federation (NWF). I appreciate the opportunity to testify before you on behalf of the Federation's 4.5 million members and supporters, including 52 affiliated state and territorial organizations. NWF has a long-standing interest in achieving cleaner water in America and has been following closely the reauthorization of the Clean Water Act.

The National Wildlife Federation has joined with a number of government, industry, citizen and environmental groups in formulating a consensus agenda for maintaining and improving the Clean Water Act. Together, we have identified five elements which we believe are essential for continuing the nation's progress toward achieving "fishable, swimmable" waters.

These five elements include maintaining and increasing the construction grants program for sewage treatment facilities, maintaining the present pretreatment program for toxic chemicals discharged by industry into sewers, and adopting a mandatory nonpoint source pollution program.

My testimony today will focus on two other essential elements: the critical role of the 5-year wastewater discharge permit in achieving water quality goals, and the growing national need for an "antibacksliding" policy.

NEED FOR BETTER WETLANDS PROTECTION

First, let me congratulate you, Senator Chafee, for scheduling oversight hearings on the administration of the Clean Water Act's Section 404 program. We applaud the efforts of you and other members of this Subcommittee in protecting wetlands and other waters of the United States.

We hope that oversight hearings will allow this Subcommittee to examine fully the substantial existing information demonstrating that the 404 program largely has ceased to provide the protection which Congress intended for wetlands and other waters. NWF would welcome the opportunity at that time to document the extensive changes made by the Department of the Army in the administration of the Section 404 program, which have undermined the protection that the program had been managing to provide for wetlands. Today, therefore, we offer only the following brief comments and recommendations.

A number of earlier efforts to weaken wetlands protection under the Section 404 program were mitigated by the settlement of the conservationist's lawsuit against Army (NWF et al. v. Marsh) in 1984. However, four years of so-called regulatory reform have left us with many other harmful changes which remain uncorrected. For example, Army has expanded use of nationwide general permits and created state program general permits, both of which amount to exemptions from individual Section 404 permit requirements and protections. Army revised its Memoranda of

Agreement with the Fish and Wildlife Service (FWS) and EPA to permit the Assistant Secretary of the Army for Civil Works to veto requests by those agencies for further review of natural resource impacts. Army has repeatedly challenged state denials of Section 401 water quality certification for nationwide general permits which the states found to have unacceptable environmental consequences. Additional regulatory changes that would weaken wetlands protection under Section 404, first proposed on May 12, 1983, are expected to become final later this year. Moreover, NWF has found and continues to find that Army is obstructing the letter and spirit of its 1984 settlement agreement with NWF.

Others have reached the same conclusion regarding Army's administration of the Section 404 program. The FWS concludes in two reports, one in 1983 for the Lower Mississippi River Valley and one in 1984 for northern New Jersey, that there has been a nearly total failure of the Section 404 program to provide protection for valuable wetland areas. The repeated refusal of Army to conduct further review of the fish and wildlife impacts on wetlands affected by the issuance of Section 404 permits led former Assistant Interior Secretary G. Ray Arnett to conclude that "Army's regulatory program is so flawed, it is no longer a usable tool to adequately protect wetlands." Another overseer of the 404 permit program, the House Government Operations Subcommittee on Intergovernmental Relations, recommended in 1984 that Congress consider transferring primary responsibility for the Section 404 program from Army to EPA.

For the above reasons, the 52 state and territorial delegates to NWF's Annual Meeting voted unanimously two weeks ago to adopt a resolution calling on Congress to make the following long-overdue, fundamental changes in the Section 404 program that are critical to more effective wetlands protection:

1) Provide authority and sufficient resources to shift responsibility for the Section 404 permit program from the Army to a Federal agency with greater interest in wetlands protection and expertise in evaluating impacts to water quality, fisheries, and wildlife; and

2) Broaden the activities regulated under Section 404 to control channelization, excavation, draining, clearing, flooding, and dredging of wetlands and other waters of the United States.

Mr. Chairman, these and other concerns about the state of wetlands protection will be covered in greater detail in NWF testimony we hope to offer during your oversight hearings.

NPDES PERMIT TERM

The primary tool of the Clean Water Act for controlling the discharge of pollutants into the waters of the United States is the National Pollutant Discharge Elimination System (NPDES). This system requires all wastewater dischargers to have a permit stipulating the types and volumes of substances which can be discharged legally. Under current law, these permits have a five-year term and a discharger must apply for a new permit when it expires.

The five-year permit term, by itself, plays a critical role in improving water quality. Increasingly stringent discharge limits are incorporated into each successive permit in order to move the nation towards the Clean Water Act's goals of "fishable/ swimmable waters". The five-year permit provides a regular and dependable opportunity for screening the quality of wastewater. It is a particularly important device for assessing toxic discharges. Presently, industries are required to monitor and control only the toxic pollutants listed in their permits. However, when applying for a new permit, they must analyze their discharge for the presence of all 126 priority toxic pollutants. In the course of this analysis they may discover new toxic chemicals in the water.

For example, the 3M Chemical Company in Cottage Grove, Minnesota, recently discovered it was discharging high levels of a toxic metal, cobalt, while screening its effluent at the time of permit reissuance. No one knows how long or at what levels cobalt was being discharged from 3M's plant. In the case of 3M, the cobalt was identified in the scan required at the end of the five-year permit term. If the scan had not occurred until the end of a ten-year permit, cobalt could have been discharged, undetected, for a decade.

The "snapshot" provided by the priority pollutant scan is a critical source of scarce data. Presently, it is being gathered every five years. If the permit term were doubled, as proposed in S. 53, this toxic data would be provided once a decade.

In addition, the quality of the nation's waters is by no means static. Water quality improvements, and deteriorations, occur seasonally and over the duration of a permit. Most often, deteriorating water quality is recognized and addressed at permit reissuance. The extent of knowledge about the toxicity of substances also changes during the life of a permit. The expiration of the five-year permit is the opportunity for discovering and incorporating such new information.

Water Quality Reopener Will Not Work

S. 53 would extend the permit term to ten years but requires permits to be reopened and upgraded if certain regulations and requirements of the Act change during the interim. Specifically, S. 53 requires a permit to be reopened if any of the following are adopted or revised: technology-based standards, water quality standards, toxics and pretreatment standards, ocean discharge criteria, or sewage sludge regulations.

The most important of these is the water quality reopener since water quality standards are the primary mechanism used to respond to potential environmental harm. However, the water quality reopener in S. 53 will not work.

In at least 18 states, NWF found that the adoption or revision of water quality criteria occurred most often when a permit came up for renewal. These 18 states (see Table I) use the priority pollutant scan required by the permit renewal application to identify toxic chemicals of concern in the particular wastewater discharge. Then the state adopts criteria or revises criteria based on the specific needs dictated by the discharge. In these 18 states, a ten-year permit will freeze pollution cleanup until the permit expires at the end of a decade.

There are 10 other states where a ten-year permit would remain unchanged for the life of the permit. These 10 states have no plan or program to adopt numerical water quality criteria in the future. Rather, they have a narrative toxics standard which says the water must be "free from toxic substances in toxic amounts". However, there is no program for enforcing the narrative requirement. In effect, these 10 states have no way of establishing water quality-based permits for toxics after the imposition of "best available technology" discharge standards.

To summarize, there are 28 states where there is no opportunity for the water quality reopener to work. In 28 states, a ten-year permit will remain unchanged for ten years.

Even in the states which adopt water quality criteria independently of permit reissuance, the water quality reopener is unlikely to work. According to EPA, only 11 states adopted or revised toxic numerical criteria in their most recent triennial water quality review.

If revisions in Section 304 water quality criteria are to function in reopening permits, states would have to adopt numerical water quality criteria for the 126 priority toxic pollutants for each stream segment in the state. Presently, fewer than 20 states have numerical water quality criteria for toxics, and where numerical criteria exist they are largely for heavy metals and a small numer of pesticides. These criteria rarely consider the chronic effects of toxics or their risk to humans through the food chain. Adoption of 126 toxic water quality criteria is not happening and is not likely to happen at any time in the near future. This would be the only certain method for ensuring the adequacy of the water quality reopener.

Ineffective Water Quality Reopeners Presently Exist

Many states have a water quality reopener in their state regulations but rarely have they been used. For example, the Rhode Island regulation reads:

> "The Director reserves the right to make appropriate revisions to this permit in order to incorporate any appropriate effluent limitations, schedules of compliance or other

> provisions which may be authorized under the Clean Water Act or state law. In accordance with Rules 15 and 25 of the Rhode Island Permit Discharge Elimination System regulations, if any effluent standard or prohibition or water quality standard is promulgated under the Clean Water Act or under state law which is more stringent than any limitation on pollutants in the permit, or controls a pollutant not limited in the permit, then the Director may promptly reopen the permit and modify or revoke and reissue the permit to conform to the applicable standard."

In the five states surveyed by National Wildlife Federation--Rhode Island, Maine, Vermont, New Jersey, and Minnesota--water agency personnel could not recall successfully reopening and upgrading a permit. To do so, the state must prove and defend its justification for revised effluent limitations. Invariably, industry challenges the changes and a time-consuming, costly process ensues. Instead, the practice is to wait until a permit expires to incorporate changed criteria.

Ten-Year Permits Will Delay Toxics Control

Historically, industry has argued strenuously for predictability and consistency when it is required to implement pollution control. The ten-year permit provision in S. 53 would give industry neither, since, conceivably, a permit could be reopened and modified after a year or less if a state adopted or revised water quality criteria. Yet, industry is a strong proponent of doubling the permit term. We believe this is because it recognizes what we have come to understand. The reopener clause in S. 53 is a theoretical safety mechanism which will not work in practice. Ten-year permits will be a ten-year period of no change in pollution control for industry. The ten-year permit provision in S. 53 is an unacceptable retreat from the goals of the Clean Water Act.

Five-Year Term Is Not the Cause of Permit Backlog

Industry and EPA argue that the 10-year permit provision is needed to eliminate the backlog of permits awaiting reissuance. However, the General Accounting Office study, "Wastewater Dischargers Are Not Complying with EPA Permits", identified the following reasons for the backlog of expired permits:

1. lack of Best Available Technology (BAT) guidelines on which to base effluent limits in industrial permits;
2. difficulties in establishing industrial pollutant effluent limits based on "best professional judgment" (BPJ) in the absence of BAT guidelines;
3. a shortage of resources needed to rewrite permits;
4. permits not rewritten pending the development of general permits for certain industrial categories;
5. low priority on rewriting permits for minor dischargers; and
6. time-consuming negotiation with permittees on effluent limits.

The most common reasons cited by states in the NWF survey were the first three: lack of BAT guidelines, difficulty establishing BPJ limits, and a shortage of resources.

The availability of finalized BAT guidelines is decreasing permit writing time from years to months. Five-year permits have become 7- to 8-year permits when they were set aside by permit writers awaiting BAT regulations. Approximately 40% of expired industrial permits are regulated by BAT guidelines.

The stumbling block created by the lack of BAT guidelines is being cleared. As of December 1984, BAT regulations had been completed for 24 of 29 industrial categories. The remaining five are scheduled for promulgation by March 1986. As a result, many complex industrial permits will no longer be delayed by extensive negotiations to establish BPJ permits.

Permit Backlog Shrinking

States and EPA have made a strong commitment to reissuing expired permits. That effort is showing results.

- Six states currently have no backlog of expired industrial major permits (Kansas, Hawaii, Nebraska, Georgia, Wyoming, Nevada).
- Fourteen states have less than a 20% backlog of major industrial permits.
- Twenty states have less than a 20% major municipal permit backlog.
- EPA Regions II, III, IV, and IX will have cleared up their entire backlog of major industrial permits by October 1985.

Permit Reissuance

State	Major Industrial FY85 Commitment %age of Backlog	Major Municipal FY85 Commitment %age of Backlog
PA	92%	87%
NY	98%	100%
NJ	50%	52%
OH	39%	58%
MI	57%	42%
CT	31%	92%
WA	54%	39%
IL	100%	98%
IN	86%	47%
VA	40%	33%

New Jersey is a good example of the shrinking backlog. There, the state legislature recently appropriated funding for hiring 7 new permit writers. Issuance of BAT regulations and increased resources has resulted in the reissuance of 45 major permits in New Jersey and the public notice of 40 additional major permits since this Fiscal Year began. In FY 84, a total of only 25 major permits were reissued. By October 1, 1985, New Jersey expects that by the end of FY 86, they will be on target to reissue permits as they expire.

The Office of Water in its "[illegible]ing Guidance and Strategic Planning and Management System [illegible]" issued on February 28, 1985, said:

> By the beginning of FY86, EPA and most NPDES delegated states will have substantially eliminated

> the backlog of major municipal and industrial permits and will concentrate on reissuing high quality permits as they expire. The general goal is to maintain a less than 10% backlog of major expired permits.

We believe this is an achievable goal by both the states and EPA.

The NWF opposes the ten-year permit provision in S. 53 because it will freeze pollution control and stymie the progress many states are making in their toxic control programs. This is not an administrative issue. It is a toxics issue. We urge the Committee to delete the ten-year permit provision from S. 53.

ANTIBACKSLIDING AND CLEAN WATER: PRESERVING WATER QUALITY GAINS

Next, I would like to discuss EPA's "anti-backsliding" policy and its significance for protecting the water quality gains we've made over the last fifteen years. The anti-backsliding policy, 40 C.F.R. 122.44(l), prohibits the reissuance of an NPDES permit with limitations, conditions, and standards less stringent than those contained in the previous permit. Exceptions to the anti-backsliding policy are allowed where the circumstances upon which the previous permit had been based have materially and substantially changed to such an extent that it would constitute cause for permit modification or revocation.

The purpose of the anti-backsliding policy is to implement the Clean Water Act's fundamental goal of continued progress towards the elimination of pollutant discharges. This means that we won't continually re-argue old debates over how much pollution is "acceptable" in a particular river or lake. In its simplest form, the anti-backsliding policy means that each NPDES permit issued to a polluter is going to be at least as stringent, if not more stringent, than the previous permit.

In considering the anti-backsliding policy, we must distinguish between two different types of effluent limitations which may be included in expiring NPDES permits. First, expiring NPDES permits may contain effluent limitations which were based on the permit writer's assessment of available treatment technology -- so-called "best professional judgment" (BPJ) or "best engineering judgment" (BEJ) permits. Or, if more restrictive effluent limitations were necessary to meet water quality standards, the permit will contain "water quality-based" effluent limitations.

In the case of BPJ or BEJ permit limits, EPA interprets its anti-backsliding policy to mean that reissued permits must contain effluent limitations at least as restrictive as the BPJ or BEJ limits, even if the subsequently issued, nationally uniform BPT or BAT effluent limitations guidelines for that industrial category turn out to be less stringent. This assumes that the polluter has been able to comply with the BPJ or BEJ limits in the expired permit. If, on the other hand, the polluter faithfully installed and operated the technology considered by the permit writer in developing the original BEJ or BPJ limit, but was unable nonetheless to meet the permit limits, then EPA allows backsliding. However, the reissued permit must limit the polluter to the level of pollutant removal actually achieved or to the subsequently-promulgated effluent limitation guideline for that category, whichever is more restrictive (40 C.F.R. 122.62(a)(17)).

Section 114(a) of S. 53 would codify virtually all of EPA's current anti-backsliding policy with respect to permits with BPJ or BEJ-based effluent limitations. We support this section. EPA has wavered in its commitment to the anti-backsliding policy and Congress should reaffirm its commitment to the goals of the Clean Water Act by adopting it as law.

Unfortunately, S. 53 is silent with respect to the application of the anti-backsliding policy to water quality-based effluent limitations. This is particularly disturbing since EPA has recently undermined the policy in this respect. If Congress remains silent in the face of this development, courts will rule that you implicitly approved of EPA's virtual abandonment of the anti-backsliding policy when applied to water quality-based effluent limitations.

Superficially, EPA maintains that its anti-backsliding policy applies to water quality-based permit limitations. However, EPA recently so broadened the "new information" exception to the policy as to threaten to swallow up the rule. In the preamble to the September 26, 1984 revisions to the NPDES regulations, EPA stated:

> EPA would like to clarify one final point on the new information exception to the anti-backsliding policy in the existing regulations. For purposes of implementing the anti-backsliding provision in section 122.44(l) for a reissued permit, where limitations in the expiring permit were based on water quality standards, 'information' under section 122.62(a)(2) may include alternative grounds (including necessary methodology; mathematical parameters, and other assumptions) for translating water quality standards into water quality-based limitations.

49 Fed. Reg. at 38022.

To translate, this means that development of any new way of calculating permit effluent limits based on water quality standards may justify increased pollutant discharges. This is likely to encourage polluters to develop new models of how pollutants behave in rivers and streams, or new methods for calculating wasteload allocations, or new proposals to base discharge limits on seasonal considerations in order to obtain a reissued permit with less-restrictive effluent limits.

This exception means that hard-fought gains in improving water quality can be given away to existing dischargers so they can turn off their in-place pollution control equipment and save the costs of operating it. It means that we will be telling polluters to spend their money on modelling streams and lakes to demonstrate the availability of "assimilative capacity" for increased pollutant discharges. It means not reserving room for economic growth in allocating assimilative capacity between existing dischargers. In sum, letting this exception stand means abandoning the "zero discharge" goal of the Act and accepting dilution as a pollution control solution.

This "parade of horribles" is not just theoretical. Exhibits A and B[*] attached to my prepared testimony demonstrate that polluters around the country are being allowed to increase their discharges of pollutants. The anti-backsliding policy no longer stands in their way since the "innovative permitting techniques" discussed in these exhibits qualify, says EPA, as "new information".

To take just one example of what EPA's re-interpretation of the "new information" exception to the anti-backsliding policy means, consider Michigan's Kalamazoo River. The Kalamazoo empties into Lake Michigan and was, historically, one of the most polluted rivers in the state. It had a heavy concentration of pulp and paper mills on its banks, and old-timers tell how the river once ran white with paper mill wastes. As a result of those discharges, the sediments in the Kalamazoo river remain heavily contaminated with PCB's and the Michigan Department of Natural Resources has advised against consuming fish caught in the river. When the Federal Water Pollution Control Act of 1972 was implemented in Michigan, the Kalamazoo river did not meet water quality standards.

---

[*] The exhibits referred to have been retained in the committee files.

Considerable progress has been made since then in cleaning up the Kalamazoo River. Its lower reaches have been designated as a "scenic" river under Michigan law. The Michigan Department of Natural Resources issued wastewater discharge permits to the pulp and paper mills limiting their pollutant discharges as needed to achieve water quality standards. Economic considerations resulted in the closing of some of the older mills. Other polluters redirected their effluent into the City of Kalamazoo's new, federally-funded, tertiary treatment plant. As a result of these efforts, water quality in the Kalamazoo river has improved significantly, at least with respect to conventional pollutants. Fish have returned. In many areas the water quality in the river now meets or even exceeds water quality standards.

Unfortunately, some polluters now think the water is too clean and have sought permission to partially turn off their treatment facilities and to increase their pollutant discharges. Last spring when its old permit expired, the Allied Paper Company argued that since water quality was now better than that required to meet water quality standards, their new NPDES permit should allow increased discharges of Biological Oxygen Demand and Total Suspended Solids. This would allow the paper mill to route some of its wastewater away from the new, federally-funded Kalamazoo POTW, and back into the Kalamazoo river. The result would be savings in sewer use charges for Allied and more pollutants for the Kalamazoo.

In Allied's view, "dischargers may use the assimilative capacity of a receiving water up to the limits imposed by the established water quality standard." Letter from U.G. Stoeffler, Allied Paper Corporation to Lyell Thomas, Michigan Department of Natural Resources at p. 2 (copy attached as part of Exhibit C). In other words, as water quality improves beyond that arguably needed to meet water quality standards, polluters can increase their pollutant discharges to keep water quality from improving beyond the standard.

The regional EPA office originally took the position that such an increase in pollutant discharges from Allied Paper would violate the anti-backsliding policy. However, EPA later so equivocated on this point that the Michigan Water Resources Commission has sent EPA two letters asking for clarification of its application of the anti-backsliding policy to this case. To date, EPA has not replied. Fortunately, the Michigan officials were able to rely on other state regulations to resist Allied's arguments. This case illustrates the flaws in EPA's new approach to applying the anti-backsliding policy to water quality-based permit limits.

In our view, there are four things wrong with this approach:

1) First, it undermines the fundamental goals of the Clean Water Act. In passing the Act in 1972, Congress declared it unlawful for *any* person to discharge *any* pollutant into the waters of the United States. Congress did not prohibit *pollution*, i.e., the demonstrable environmental phenomenon. Aware of decades of frustration in attempts to determine "acceptable" levels of pollution, Congress instead prohibited any discharges of pollutants regardless of whether an immediate adverse effect could be demonstrated. Congress also articulated the nation's goal of "zero discharge".

These were bold and inspiring goals that Congress set for the nation. So bold that some would now ridicule Congress' vision. Even if we haven't been able fully to implement that vision yet, these goals still have vital meaning. If these goals mean anything, they mean that we don't look back. They mean that polluters that have made the capital investment in pollution control facilities must continue to operate those facilities, even if we cannot prove a direct environmental benefit for every increment of treatment. They mean that the only thing left to argue about in reissuing expired discharge permits is whether additional treatment is needed, not whether existing treatment will be continued.

2) Allowing new models of assimilative capabity, and new mathematical methods of calculating water quality-based permit limits to justify backsliding is also wrong because it narrows unacceptably the margin of safety in protecting human health and against environmental harm. By improving water quality beyond that presently thought minimally necessary to protect water quality, we insure ourselves against the consequences of error. Those polluters like Allied who demand their "share" of water quality improvements for more pollution would have us shave that line as thin as possible.

Congress' adoption of the 1972 Act represents the culmination of its frustration with the process of calculating how much pollution was acceptable. Congress said then that dilution with our lakes and rivers was not an acceptable solution to pollution. We still believe this to be so. We don't want permit writers to return to the days of unending calculations of acceptable pollutant loadings. Where polluters have been able to meet the discharge limits in their old permits, at least we ought to hold them to that level of treatment. If, as a result, water quality improves beyond that minimally required to meet standards, then we have a margin of safety to protect us against our errors of ignorance.

This margin of safety in controlling conventional pollutants such as total suspended solids is particularly important in light of our failure adequately to control toxic pollutants. In many cases, controlling conventional pollutants like suspended solids, without specifically controlling all the toxic pollutants which bind to those solids, will result in increased mass loadings of toxic pollutants.

3) Re-fighting old battles over past discharge limits requires the significant expenditure of scarce resources by industries and municipalities on the one hand and by permitting agencies on the other with no environmental benefits. If Allied Paper demonstrates the existence of "unused" assimilative capacity in the Kalamazoo River, then the Michigan permit writers must review and evaluate that demonstration. They might even feel the need to do a new model of the river to make sure the assimilative capacity really existed.

EPA has complained to you about the backlog of expired permits, yet EPA's new interpretation of the anti-backsliding policy would require that overburdened permit writers defend their old permits, in addition to writing new ones. We believe that permit writers should be focussing on developing additional controls as needed to meet water quality standards. We don't have enough resources to re-argue and re-analyze old permits.

4) Finally, if we allow backsliding by existing polluters and give them the assimilative capacity of our lakes and rivers beyond that required to meet water quality standards, then there will be no room for new dischargers. In order to allow for economic growth, there must be some available assimilative capacity. Yet, polluters like Allied would have that given to existing dischargers, so they can turn off pollution control devices now in place.

The Allied Paper Company example is not an isolated case. There the MDNR stood firm and refused to allow the backsliding. However, as the correspondence attached to my prepared testimony illustrates, EPA still has not clarified its interpretation of the anti-backsliding policy in a case like this.

Even more disturbing, as the other exhibits to my prepared testimony demonstrate, EPA is considering a host of "innovative permitting methods." From our point of view, they all mean one thing: more discharges of more pollutants into our lakes and rivers. Whether or not certain specific "innovations" which amount to a retreat from the goals of the Clean Water Act should be allowed ought to be a question of national policy. Under EPA's new exception to the anti-backsliding policy, development and use of these "innovations" is left up to case-by-case determinations.

We ask that you amend the language of section 144(a) of S. 53 also to prohibit backsliding from existing permit limits which were originally based on water quality considerations. It's the only way to preserve hard-earned water quality gains.

CONCLUSION

Mr. Chairman and Committee Members, the National Wildlife Federation urges you to make critically needed improvements in S. 53 in order to maintain water quality and wetlands protection. We believe that you will be convinced of the need for major reforms in the wetlands permitting program at the conclusion of your oversight hearings.

The control of toxics in wastewater is inextricably linked to the ratchetting-down of toxic pollutant limits in successive five-year permits. We urge you to delete the ten-year permit provision from S. 53.

To recoup the enormous investment made by the taxpayer in sewage treatment systems and by industry in pollution control equipment, we urge you to extend the anti-backsliding policy to water quality-based permits. Finally, we ask that you maintain sewage treatment construction grants and assure funding for a mandatory nonpoint source pollution program.

The Federation congratulates the Committee on their continued leadership on critical environmental concerns. Thank you for this opportunity to present our views.

NATIONAL WILDLIFE FEDERATION
1412 Sixteenth Street, N.W., Washington, D.C. 20036 202—797-6800

Table I: Survey of States Adopting or Revising Water Quality Criteria Independent of Permit Reissuance

State	Adopt/Revise Criteria Independent of Permit Reissuance
Alabama	yes
Alaska	yes
Arkansas	?
Arizona	?
California	yes
Colorado	yes
Connecticut	no
Delaware	?
Florida	no
Georgia	?
Guam	yes
Hawaii	?
Idaho	yes
Illinois	yes
Indiana	no
Iowa	yes
Kansas	yes
Kentucky	no
Louisiana	no
Maine	no
Maryland	yes
Massachusetts	yes
Michigan	no
Minnesota	no
Mississippi	no
Missouri	yes
Montana	yes
Nebraska	yes
Nevada	yes

Table I, continued

New Hampshire	no
New Jersey	yes
New Mexico	?
New York	no
North Carolina	yes
North Dakota	yes
Ohio	no
Oklahoma	?
Oregon	some
Pennsylvania	no
Rhode Island	no
South Carolina	yes
South Dakota	yes
Tennessee	yes
Texas	yes
Utah	yes
Vermont	yes
Virginia	no
Virgin Islands	?
Washington	yes
West Virginia	yes
Wisconsin	no
Wyoming	yes

Summary: 40%, 18 of 45, states adopt or revise water quality criteria at permit reissuance.

? Uncertainty due to conflicting or insufficient information.

Prepared: December 1984.

SIERRA
CLUB

330 Pennsylvania Avenue, S.E.
Washington, D.C. 20003 (202) 547-1141

STATEMENT OF J. MICHAEL MCCLOSKEY
EXECUTIVE DIRECTOR OF THE SIERRA CLUB
BEFORE THE SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ON
THE REAUTHORIZATION OF THE CLEAN WATER ACT
S. 53 AND S. 652

MARCH 28, 1985

I am J. Michael McCloskey, Executive Director of the Sierra Club. On behalf of the 350,000 members of the Club, I want to thank you for this opportunity to appear before you today to discuss the reauthorization of the Clean Water Act.

The Sierra Club has joined with twelve other environmental, local government and private organizations in support of four amendments to S. 53 and S. 632. Our proposed amendments to the Clean Water Act legislation would:

- eliminate the ten-year NPDES permit renewal period;
- strengthen the antibacksliding provision;
- add the control of non-point pollution to the three construction grants set-aside programs; and,
- increase the constructon grants fund above the current $2.4 billion level.

With the Chairman's permission, a copy our letter of March 11, 1985, to Senator Robert Stafford from the thirteen environmental, local government and industry organizations supporting the above amendments is attached to my testimony.

Because of limited time, I would like discuss in detail only one of the four amendments to S. 53 that we are asking this Subcommittee to make: the antibacksliding provision. Before moving to that subject, however, I would like to say a few words about one other issue that is of grave concern to us, the extension of the NPDES permit term to ten years.

THE TEN-YEAR NPDES PERMIT

We strongly oppose any amendment to the Clean Water Act that will weaken the law. The proposed extension of the NPDES permit term from five to ten years severely undermines our national commitment to clean water and should be opposed by the members of this Subcommittee. When the extension of the NPDES permit renewal period was originally proposed, the supporters of this change asserted that it would not undermine the permit process if sufficient "reopeners" were added. Reopeners would allow the permit standards to be strengthened during the term of the permit, if the need arose. Unfortunately, the protection of reopener language is an illusion. If adopted, the result will be to put the brakes on our national commitment to clean up water because:

- at least 18 states only adopt or revise water quality criteria at the time the permit comes up for renewal; and,

- the states that already require permits to be reopened prior to renewal rarely do so.

Reopening the permit prior to its expiration date places the burden of proof for justifying new effluent limits on the state. There is no question in our minds that by extending the NPDES term to ten years we would be locking ourselves into ten or more years of pollution at today's levels. In effect, this means ten more years before the water quality standards would be reviewed and upgraded to reflect new water quality data or water quality problems.

ANTIBACKSLIDING

Some members of this Subcommittee may recall that when the Clean Water Act was passed back in 1972, the Subcommittee spurned the notion that the solution to pollution is dilution. I am sorry to report that Congress' rejection of this concept did not stick. With the apparent approval of EPA, the granting of seasonal waivers and the weakening of NPDES discharge permits when they are renewed, reissued or modified are becoming major problems. In effect, the assimilative capacity of rivers and lakes will be used as an excuse to reduce pollution control efforts that are already or scheduled to be put in place.

We are not the only ones concerned about backsliding, for S. 53 takes a first step in trying to dealing with it. However, more needs to be done. Antibacksliding should apply not only to the "Best Professional Judgment" (BPJ) permits, as S. 53 does, but also to permits based on "Best Available Technology" (BAT) effluent guidelines. If antibacksliding covered permits based on the BAT guidelines, it would mean that once the discharge standards were written into a permit, a state could not allow more pollution under seasonal waivers or other exemptions. It would also prevent backsliding if a state were to downgrade the classification of a particular stream segment. In other words, extending antibacksliding to cover BAT would provide a uniform minimum floor of protection from industrial pollution. Once this floor is attained, it should not be weakened.

The Act needs to be amended so as to prohibit the weakening of NPDES discharge permits when they are renewed, reissued or modified, and to prohibit the granting of seasonal waivers. A draft report to EPA, recently obtained through a Freedom of Information Act request, demonstrates that seasonal waivers are a growing problem. Of 46 states responding to a survey, at least 29 states "frequently" use seasonal waivers. It has become a common practice in many states to grant industries and municipalities winter waivers that allow higher levels of pollution in their discharges during the colder months when rivers have a greater assimilative capacity.

The report by Urban Systems Research & Engineering, Inc. of Cambridge, Mass.[1], lays out the extent of the states' use of seasonal permits as follows:

4 states consider seasonal permits in ALL or ALMOST ALL cases;
10 states consider seasonal permits for ALL MUNICIPALS;
16 states consider seasonal permits in CERTAIN COMMON TYPES of situations;
6 states consider seasonal permits ON REQUEST from the permittee or in certain uncommon types of cases;
5 states consider seasonal permits only in exceptional situations; and,
5 states find seasonal permits NOT APPLICABLE to their conditions.

There is another type of backsliding problem. When a major industry shuts down, other industries will sometimes petition the state to allow an increase in their pollution discharges. Weakening the discharge standards because a river or lake is now cleaner (or colder) and therefore able to accommodate additional pollutants should not be allowed.

The continued use of backsliding is tearing a giant hole in our national water pollution cleanup effort! If we ever hope to reach the goal of the Clean Water Act to achieve waters safe for fishing or swimming, backsliding must be stopped! It's a bad idea! We will never reach our clean water goal if our rivers or lakes are always filled with the maximum amount of pollution that they can possibly withstand. The Act requires national uniformity in standard setting so that all industries with NPDES permits will be treated in the same manner. A permittee should not be put at an economic advantage or disadvantage with respect to similar firms in other parts of the country or within the same state.

In some rare instances, however, the original permit was written without the benefit of adequate scientific data upon which to base the discharge standards. Therefore, when the permit comes up for renewal, and the firm can make the case that the discharge standards were not realistically set and the permit limits could be relaxed without causing damage to water quality, then an adjustment could be made. However, backsliding should not be allowed merely because additional assimilative capacity is available or because of changes in waste load allocations.

FUNDING FOR CONTROL OF NON-POINT RUNOFF POLLUTION

The runoff from farms, city streets, and construction sites is a source of half of the water pollution in America. S. 53 provides a good beginning for the control of runoff water pollution. Although S. 53 authorizes funding for runoff control, there is little likelihood that in this time of fiscal austerity the funds will be appropriated for this badly needed program. Without proper funding, the control of non-point runoff will continue to be the nation's major unsolved water pollution problem.

The Sierra Club recommends that state and local governments be allowed to use the existing "set-aside" funds, currently made available through the construction grants program, for the control of runoff. For example, if the control of non-point pollution were made a part of the innovative and alternative technologies set-aside program, the growing amounts of phosphorus and nitrogen reaching our rivers and lakes might be controlled without building expensive tertiary water treatment plants. The rural communities' set-aside program and the governor's set-side program might also be made available to address these cost-effective non-point pollution control alternatives.

In Colorado, there is a good example of how controlling non-point runoff pollution can help solve serious water quality problems without a large expenditure of funds. The Dillon Reservoir, which provides the City of Denver with one-half of its drinking water, is fed by a stream that, despite the best efforts of the state, was not meeting the established water quality standards. At first it appeared that the state would have to require the industries along the stream to go beyond Best Available Technology standards, which might require the installation of more advanced treatment facilities. In order to avoid more costly alternatives, the industries along the stream joined together to clean-up non-point pollution sources and agreed to restrict future point and non-point discharges. We are told that the stream is now meeting the established water quality standards without having to resort to purchasing additional costly treatment equipment.

Funds for the implementation of a program to control non-point runoff pollution should be made available to the states through the three set-aside programs — innovative and alternative technologies (Subsection 205(i)), rural communities (Subsection 205(h)), and the Governor's (Subsection 201(g)(1). The innovative and alternative technologies set-aside program should be kept at its current funding level of 4 percent, rather than reducing it to 2 percent and then to zero, as proposed in S. 652. Contrary to what we are being led to believe, the I & A program is working very well. According to EPA, there have been 3092 grants awarded between FY 1979 and FY 1983. During that time, 91 percent of the $405.5 million has been spent. Thirty states are using all of their allotted funds in the I & A set-aside program. Twenty states are returning some part of these funds because they have no way to use the money under the limitations of this program. Adding the control of non-point runoff to these accounts would give the state greater flexibility in the use of these funds.

The federal government is a major contributor of non-point runoff pollution. There should be a program to require that such agencies as the Departments of Transportation, Agriculture, and Interior control non-point runoff when implementing their programs. Activities of these federal agencies are a major contributor of non-point pollution runoff. For example, the Federal Highway Administration could effectively control non-point runoff from all federally funded highway construction and rehabilitation projects through its regulatory process. To ensure compliance with the Act, a provision should be added to the Clean Water Act to allow citizen suits against the above-mentioned federal agencies if their actions contribute to non-point pollution.

CONSTRUCTION GRANTS FUNDING

We believe that the people of this nation are dedicated to cleaning up water pollution. To finish the job we have begun, we must be willing to provide the necessary funding to ensure that the sewage treatment plants that are needed, but not yet under construction, are built. In order to finish this job, which EPA reports will require an investment of $108.9 billion by the year 2000, the Congress must authorize and fund an increase in the construction program above the current $2.4 billion level. If an increase in funding is not provided, it will be impossible to sustain the progress in meeting the 1988 secondary treatment deadlines and other requirements of the Clean Water Act.

We are not convinced that a construction grants loan program can or should replace the current grants program. We do not think that it is practical to expect that some small community can come up with four million dollars on its own to repay such a loan. However, we have no problem with the Congress authoring a loan program that complements a properly funded grant program.

THE CORPS 404 DREDGE AND FILL PERMIT PROGRAM

The members of the Sierra Club are very concerned about the very poor performance that the Corps of Engineers has demonstrated in carrying out Section 404 of the Clean Water Act. The 404 program under the Corps is not working. We are continuing to lose our wetlands at an increasing and alarming rate. According to the Fish and Wildlife Service, there were approximately 215 million acres of wetlands in the lower 48 states before the settlement of the United States. By the mid-1970's only 99 million acres of wetlands remained. In the last 20 years alone the nation lost 9 million acres of wetlands -- an area about the size of New Jersey.

In a March 1984 report on the status of our nation's wetlands, the U.S. Fish & Wildlife Service called upon public agencies, private industry, and private groups and individuals to take immediate action to protect the remnants of our vanishing wetlands. We join in the Service's call for action at all levels of government to stop the mismanagement of the nation's wetlands.

We are very pleased to learn that the Chairman will be holding oversight hearings on the Corps' management of the 404 program in the near future. We are very grateful for Senator Chafee's interest in and concern over the loss of our wetlands.

---

[1]. Draft report, "State Experience With Water Innovations and Potential For Increased Use", prepared for the Environmental Protection Agency by Urban Systems Research & Engineering, Inc., Cambridge, Mass., January 7, 1985.

AMERICAN RIVERS CONSERVATION COUNCIL o ASSOCIATION OF METROPOLITAN
SEWERAGE AGENCIES o CLEAN WATER ACTION PROJECT
ENVIRONMENTAL POLICY INSTITUTE o FRIENDS OF THE EARTH
THE IZAAK WALTON LEAGUE o THE LEAGUE OF WOMEN VOTERS
NATIONAL WILDLIFE FEDERATION o SIERRA CLUB o TROUT UNLIMITED
UNITED STATES CONFERENCE OF MAYORS o U.S. PIRG
WATER AND WASTEWATER EQUIPMENT MANUFACTURERS ASSOCIATION

March 11, 1985

The Hon. Robert T. Stafford
Chairman
Environment and Public Works Committee
U.S Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Local government, environmental and private organizations have joined together in a new effort dedicated to an improved and reauthorized Clean Water Act this year. This letter reflects our major concerns. We urge you to give the following proposed recommendations your careful consideration.

1. CONSTRUCTION GRANTS

Increase the funding for the construction grants program above the minimum $2.4 billion annual program to ensure sustained progress in meeting the 1988 secondary treatment deadlines and other requirements of the Act.

The Administration's proposed four-year phaseout of the wastewater construction grants is unacceptable at this point in the program. These recommendations totally negate the historical commitment of federal funds to specific national water quality goals. Under the guise of deficit reduction (somewhat limited and questionable savings projected at $190 million overall during FY 1986-88), these recommendations also squander a one-time opportunity to secure substantial environmental gains at a critical stage in the program. In fact, there is ample justification for increased funding at this time given EPA's 1984 Needs Survey, the goals of the Act and its approching deadlines, and the number of major projects ready to receive federal funding commitments.

One of our specific concerns is the inability of some states to amass sufficient funding under the current allocation system to support major projects which, given their size and complexity, have not received

received adequate prior grant support. The 201 Program must in some way target funding to these areas to ensure that these major projects are completed in a timely manner and to secure the associated environmental benefits for the nation.

Another important concern under the existing 201 Program is funding for Combined Sewer Overflow projects with demonstrated water quality benefits. While Congress expected that grandfathering provisions and the governor's discretionary set-aside authority would deal with these important projects, to date this has not been the case. The Congress should review the progress made under the 1981 changes and consider whether the Act sufficiently addresses those projects which are cost efficient and essential to achieving water quality goals.

Finally, there are now several proposals pending to establish state revolving loan programs capitalized in part through federal grant assistance. Such loan programs must complement a properly funded grant program.

2. NPDES PERMIT TERM

Maintain the current five-year term for National Pollutant Discharge Elimination System (NPDES) permits.

The present five-year permit term protects water quality and ensures a period of predictability for industry and municipalities. A thorough examination of the discharge permit program at the federal and state levels indicates that the extension of the term to ten years would not adequately protect water quality. The House and Senate bills (H.R. 8 and S. 53) propose to have permits reopened and upgraded when new water quality criteria are adopted or revised. In at least 18 states, water quality problems are discovered and addressed at permit reissuance when changes can best be incorporated into the new permit. The extension of the permit term to ten years would lock in existing toxic pollution control requirements for a decade, further delaying the attainment of our national goal to attain fishable, swimmable waters.

The permit backlog is not caused by the current five-year permit term. The backlog can be attributed to EPA's delays in issuing the Best Available Technology (BAT) guidelines needed to establish the limits in the next round of permits, and to insufficient staff at both the federal and state levels to process permit renewals. Since the BAT guidelines are now being promulgated, delays due to inadequate guidance should be eliminated.

3. NON-POINT RUNOFF POLLUTION

Provide for a mandatory program of planning and implementation including grants to states at sufficient levels of annual funding and amend existing programs, as noted below, to strengthen non-point pollution abatement objectives.

The Clean Water Act can be strengthened considerably through the enactment of a program specifically designed to require states to develop and implement non-point programs. For some time, it has been widely recognized that the absence of such a program has compromised existing programs and objectives of the Act. At the outset, each state should be required to develop and implement a non-point program and adequate funding should be authorized to support this effort.

In addition to state and local non-point programs, there must be a program aimed at federal agencies and activities. Federal consistency and cross-compliance language should be added to the House and Senate bills to ensure agencies, such as the Departments of Transportation and Agriculture and the Soil Conservation Service, implement their programs in a manner consistent with controlling non-point source pollution. A citizen's suit provision which allows suits against the above agencies to ensure enforcement of consistency should be added.

We also recommend that existing programs be amended to supplement the state non-point program requirement. First, states and localities should be allowed to use set-aside funds under Title II for non-point pollution control programs that will eliminate the need for more costly improvements now funded under Title II. For example, increasing amounts of phosphorus and nitrogen from non-point sources can cause some communities to build advanced wastewater treatment systems. In this case, if the innovative and alternative technologies program allowed funding of a less costly non-point solution to this problem, it would avoid construction of a tertiary facility which is eligible for funding under the basic Title II program. The rural communities set-aside (subsection 205(h)) and the Governor's set-aside (subsection 201(g)(1)) could be reviewed for changes to address these cost-effective non-point pollution control alternatives.

4. ANTIBACKSLIDING

Establish an antibacksliding provision which, under most circumstances mandates that no permit may be renewed, reissued, or modified to contain effluent limits less stringent than the previous permit.

This issue proves to be most difficult to resolve in terms of proposing specific statutory language for the Clean Water Act. This group is committed to working with you to develop specific amendments to address backsliding issues. Backsliding may be appropriate when the original permit standards were written without the benefit of subsequent research and information upon which to base the standards. However, backsliding should not be allowed merely because new information suggests that additional assimilative capacity is available or because of changes in waste load allocations.

5. PRETREATMENT PROGRAM

In the 1984 Clean Water Act proposed legislation there were several proposals for changing the pretreatment program. We do not support legislative changes to the pretreatment program given EPA's recent efforts to aggressively implement the recommendations of the Pretreatment Implementation Review Task Force (PIRT) and dedicate adequate budget and staff to this effort.

We very much appreciate your consideration of these concerns and look forward to working with you for the timely reauthorization of the Clean Water Act.

Sincerely,

Chris Brown
CHRISTOPHER N. BROWN
Conservation Director
American Rivers
Conservation Council

Ron M. Linton
RON M. LINTON
Executive Director
Association of Metropolitan
Sewerage Agencies

David Zwick
DAVID ZWICK
Executive Director
Clean Water Action Project

Louise C. Dunlap
LOUISE C. DUNLAP
President
Environmental Policy
Institute

Maitland Sharpe
MAITLAND SHARPE
Conservation Director
The Izaak Walton League

Julia Holmes
JULIA HOLMES
Legislative Action Chair
The League of Women Voters

Jay D. Hair
JAY D. HAIR
Executive Vice President
National Wildlife Federation

J. Michael McCloskey
J. MICHAEL McCLOSKEY
Executive Director
Sierra Club

E. Hal Davis
E. HAL DAVIS
President
Trout Unlimited

John J. Gunther
JOHN J. GUNTHER
Executive Director
United States Conference of Mayors

Geoff Webb
GEOFF WEBB
Washington Representative
Friends of the Earth

Reid Wilson
REID WILSON
Legislative Representative
U.S. Public Interest Research Group

DAWN KRISTOFF
President
Water & Wastewater Equipment
Manufacturers Association

STATEMENT OF THE

WESTERN REGIONAL COUNCIL

BEFORE THE SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

HEARING ON
S. 53
AMENDMENTS AND REAUTHORIZATION
OF THE CLEAN WATER ACT (PL 95-217)

WASHINGTON, D.C.

MARCH 28, 1985

Mr. Chairman and Members of the Subcommittee:

The Western Regional Council appreciates the opportunity to bring to the Subcommittee's attention several amendments the WRC proposes to the Clean Water Act. I am Richard Austermann, Special Counsel, Regulatory Affairs, Amax, Inc., in Denver, Colorado. I am appearing here today on behalf of the Western Regional Council's Clean Water ad hoc Committee.

The Western Regional Council was organized to provide a unified voice for the business community of the Intermountain West. Its membership is composed of chief executive officers of corporations representing a number of major industries in the Intermountain West. The WRC works to establish balanced policies which consider the benefits of both economic development and environmental preservation in the West.

Water is a critical commodity in the West; therefore, quantitative and qualitative water management is of significant importance to the Western Regional Council. Although the Council supports the basic concepts of the Clean Water Act, the Council asserts that a nationwide "across the board" application of the Act results in certain provisions having a significant adverse impact on the West due to the unique features of western water. The intent of the Council's recommendations is, therefore, not to change the basic concepts of the Act, but to provide the flexibility in implementation which is required for sound water management in the West. The Council's testimony addresses three areas of the Act which warrant the Committee's consideration.

1. THE EFFECT OF WATER QUALITY STANDARDS ON WESTERN WATER

When Congress adopted the Federal Water Pollution Control Act Amendments in 1972, attention in both government and industry was focused on implementation of the NPDES permit program and the development of technology-based effluent limitation guidelines (i.e., BPT and BAT). The permit program is now in place and effluent guidelines have been adopted for most major industries. With these jobs out of the way, significant governmental effort is being directed back towards the Act's original, pre-1972 concern -- the development and protection of ambient water quality standards.

Section 303(c) of the Clean Water Act requires states to establish "water quality standards" for all "navigable waters" within their borders. It is important to note that, for the most part, these standards are to protect the "fishable-swimmable" goals of the Act and, therefore, result in standards to protect aquatic life not public health. These "standards" must consist of two things:

1. Designated beneficial uses for the waters; and

2. Water quality criteria for those uses.

In adopting these standards states are allowed to consider economic issues and the standards must be submitted to EPA for approval. EPA must grant approval if the standards meet "the requirements" of the Act. If EPA "disapproves" any standard submitted to it, the concerned state must be given a reasonable amount of time to develop a substitute standard which then becomes federally enforceable.

The standards have a direct regulatory impact because of the role they play in the NPDES permit program.

Section 402(a) of the Act requires NPDES permits to "meet" certain minimum requirements. The most prominent of these, as discussed above, is the requirement that discharges reflect minimum levels of treatment technology, i.e., BPT and BAT. However, Section 302(b)(1)(C) of the Act also provides that:

> . . . there shall be achieved . . .
>
> ***
>
> not later than July 1, 1977, any more stringent (effluent) limitation . . . required to implement any applicable water quality standard established pursuant to this Act . . .

In other words, dischargers must meet effluent limitations more stringent that BPT and BAT -- the technology-based standards -- if necessary to protect receiving water quality.

Impact on the West: In many western states, and specifically in Colorado, when water quality standards were first established for surface waters, they were designed to protect all stream uses and were set at very stringent limits. Effluent limits necessary to protect these standards are thus much more stringent than technology-based effluent limitation guidelines, i.e., BPT and BAT. In wetter regions of the country, this disparity often has little or no practical regulatory effect -- dilution flows generally enable technology-limited discharges to protect receiving water quality. Unfortunately, in perhaps the majority of cases in the arid west, flows in many streams are subject to significant seasonal variations and stream flows are small compared to discharge flows. In fact, it is common at certain times of the year to find that a discharge from a facility is the entire stream. Due to the combined effect of the low flow conditions and the need to protect the stringent standards, dischargers have to install treatment systems well beyond what is considered under law as the "best available technology economically available" (BAT) or go to zero discharge. While these options may be the desired result, EPA is not allowing local economics to be a consideration when treatment is required beyond BAT or when zero discharge is applied. EPA seems unwilling to differentiate between economics as a factor in the protection of aquatic standards versus health standards.

For these reasons, industries and municipalities are being required to install additional treatment regardless of whether it is reasonable, whether benefits are derived from the treatment, or whether technology is even available. (Reliable advanced treatment does not currently exist for all waste streams and pollutants.) It is not unheard of to have the cost for such advance control technology be at a higher cost than the initial capital investment of a project. For example, a power plant in Colorado with a $50 million capital investment will require $450 million in technology controls to meet the water quality stream standards currently in place.

At present, 72 Colorado communities will soon be required to install very costly advanced waste treatment systems (AWT) which is beyond secondary and in some cases tertiary treatment. Ironically, the federal policy on construction grants does not allow their use for Advanced Wastewater Treatment Systems because there is not enough "tangible benefit" from the treatment to warrant the expenditure of federal funds. Similarly, the cities claim they have no money for such advanced treatment because their citizens are not certain it is a reasonable expense.

Basically, the Act is requiring that large sums of money be spent on additional treatment where the incremental benefits to be gained are very small. In the West, where water quality and water quantity are interrelated, the effect of this requirement can be both detrimental to the industry and to the environment as well. Following are two examples of these effects.

1. One facility's treatment is presently well beyond BAT and protects most of the water quality criteria (designed to protect the standard) with the exception of one or two parameters for certain metals. A variety of aquatic life, including Brook Trout, have

been reinstituted in the stream since the treatment began eight to nine years ago. However, the cost of additional treatment to attempt to allow more sensitive trout species to exist in several miles of stream may cost the company between $30-50 million dollars--enough money that could result in a decision to shutdown the facility.

2. An existing power plant presently treats beyond BAT and discharges into a small tributary that flows several miles before flowing into a river. The company can respond to the Act's requirement for additional treatment in several different ways. First, if they have a "consumptive water right," they can choose to not discharge water (by evaporation) thereby drying up the small stream and causing environmental destruction of the stream under the guise of protecting water quality. Second, since most western water rights are not "100% consumptive" but require return flows, the company can choose to pipe the discharge directly to the river or directly to a downstream water user thereby bypassing the stream. This would also cause the stream to dry up at certain times of the year creating environmental destruction of the stream. Finally, the company can provide additional treatment at considerable expense or close the facility.

   This is not an isolated incident. In fact, most new western power plants built in the last ten years and many industrial and municiple plants have zero discharge permits, thereby avoiding advanced treatment. Unfortunately, the effect of the permits is to cause many streams to be destroyed by drying them up at certain times of the year. In the West, where water is already scarce, this trend cannot continue without creating both severe economic and environmental consequences.

These conflicts exist because the Act is simply not clear nor flexible in allowing for economics and unique western conditions to be considered in the water quality standard setting and implementation program. For the following reasons, western states do not have the flexibility to respond to the foregoing problems in a reasonable fashion.

1. Even though allowed to consider economics in initial stream classifications, states have often ignored economic and technical limitations when establishing stream standards. Thus, their proposals fail to reflect any sort of meaningful planning.

2. Even if permitting agencies consider economics in the standard-setting process, the standard still does not adequately reflect practical economic concerns because the economic consequences are not known until the permitting process is completed. (Due to the absence of any advance correlation between water quality standards and effluent limitations, industries are unable to predict the economic consequences of the agencies proposals until later when the standards are backed into their permits.)

3. Unfortunately, the permitting phase is the only stage at which economics cannot be considered if the effluent limits are water quality limited. (Economics are allowed in establishing BAT and water quality limits.)

In order to remedy this, industries and the states need to be allowed to consider economic issues at the permitting process and without EPA disapproving such permits strictly on the basis of the "zero discharge," "fishable, swimmable" goals of the Act.

Recommendation: The general solution to the problem is simple. Western states must be given the proper apportionment of power when dealing with the stringent standards designed for the protection of sensitive aquatic life. In order to assure the states this flexibility, changes to the Act can be accomplished in several ways.

Ideally, the existing standard-setting process should be modified to require a comprehensive, basin-wide water quality assessment, an assessment of the impact of proposals on dischargers, and a comparison of these [illegible] with regional planning goals. And, in fact, Sections [illegible], 303(e) and 304(a) of the Act suggest that such a modification would be consistent with the existing statutory scheme. However, as a practical matter, comprehensive hearings such as this are never held for the issues are too complex. Instead, each of the elements is addressed on a piecemeal basis.

In view of this situation, a practical solution is probably to amend Section 302 to allow the state as well as the Administrator to determine on a permit-by-permit basis whether "a reasonable relationship exists between the economic and social costs and benefits" and thus modify the water quality based effluent limits accordingly. This would eliminate the "Catch 22" that prevents any detailed consideration of economic and technical issues until the discharger has worked through a compliance schedule.

The Western Regional Council is not wedded to any specific solution but is willing to offer suggested amendments for your consideration.

[For a more indepth discussion of the problem, the reader is referred to Appendix A. Appendix A contains a general example, one case study, and two examples which clarify this issue.]

2. POINT SOURCE DEFINITION - STORMWATER RUNOFF

One of the chief purposes of the Clean Water Act is to regulate the discharge of harmful pollutants from industrial processes. However, the Act only regulates discharges from "point sources," which are generally defined as "discrete conveyances" such as pipes (Sec. 502(14)). The Act does not, for example, authorize EPA to regulate diffuse storm runoff or snowmelt running across an industrial facility. However, EPA has interpreted the term "point source" to include devices which gather, collect or otherwise divert stormwater runoff or snowmelt. As a consequence, mining and other industrial facilities that would have no obligation to treat diffuse stormwater runoff or snowmelt, but have constructed diversion structures to prevent diffuse storm runoff or snowmelt from contacting process areas and contacting toxic materials, should not be required to obtain an NPDES permit requiring them to treat these waters.

Impact on the West: The amounts of stormwater runoff and snowmelt in the mountainous areas surrounding western mining facilities are very large and the cost to treat this runoff is often prohibitive. Much of this stormwater runoff is not toxic and to require treatment of water not contaminated by the industry seems punitive.

Recommendation: Devices that merely divert or gather and collect storm runoff and snowmelt without adding to their contamination should not be considered "point sources" subject to EPA regulation. Including such devices in the definition of "point source" penalizes many companies for installing devices that serve to prevent or minimize pollution and were not required to be installed. Either the statute should be amended to clarify this exemption or regulations should not cover such structures.

3. ZERO DISCHARGE GOAL - STATE WATER RIGHTS

It is the goal of the Act that the discharge of pollutants into navigable waters be eliminated by 1985 (also known as zero discharge goal). The legislative history reveals that Congress never intended the zero discharge goal to be legally binding, but only a "target." The term pollutant is broadly defined under the Act to include all waste regardless of quality (Section 502(6)). Therefore, regulatory bodies are interpreting the goal literally to mean that all discharges, including the return of reclaimed water from industrial and agricultural use, must be eliminated by 1985 regardless of quality. Thus, the "zero discharge" concept is moving the implementing sections and programs in the Act toward elimination of all discharges.

In the Intermountain West, water basin compacts and surface water adjudications have been based on historical flows which include return flows after upstream water use. Also, many of the water users on such rivers as the Colorado are anticipating return flow credits in order to fulfill future water needs. However, as a result of the zero discharge goal, as interpreted by state and federal agencies, states are being compelled to abandon water rights. Relative to water quality concerns, states are again compelled to encourage consumptive use regardless of the fact that water quality impact from returned waters would be negligible. This effectively results in the compromising of the policy in Section 101(g) to protect a state's right to allocate water quantities within its boundaries and manage its water based on both quantity and quality considerations.

Impact on the West: In the Intermountain West, where many surface streams can reach zero flows during periods of the year, downstream water availability relies heavily on the return of water to the surface stream. For example, Arizona, in its Water Pollution Control Act, requires the regulatory agency, in adopting regulations concerning discharges, to ". . be guided by the principle that waters of the State are put to beneficial use within the State and become return flows to the waters of the State and subsequently reused, and that such rules and regulations shall not diminish the water available for such beneficial uses, nor deprive the State of such water." (A.R.S. Section 36-1854 B). EPA Region 9 had refused to grant primary enforcement authority to the State of Arizona under the NPDES program. A major stumbling block in this delegation of authority has been this legislative policy which Region 9 believes conflicts with the zero discharge goal. While the real goal in Sec. 101(a)(1) of the Act should be to eliminate the discharge of pollutants in harmful quantities, Congress has failed to consider such an amendment. However, in 1984 the Senate Committee Report No. 98-233 on P. 4 attempted to clarify that state's NPDES programs could not be denied because state water rights programs require return flows.

Recommendation: It is recommended that either Section 101(a)(1) be amended to read as follows;

> "It is the national goal that the use and re-use of waters of the United States be achieved with the minimum increase of pollutants and that the discharge of pollutants in harmful quantities into navigable waters be eliminated by 1985."

or that Report language, similar to that adopted in Senate Report No. 98-233, again be included in the Committee Report. That language is as follows:

> "The Clean Water Act establishes a number of goals which may need to be adapted in different geographic areas that exhibit extreme climatological conditions. These goals depend on balancing the facts surrounding each case so that solutions to prevent, reduce, and eliminate pollution are consistent with State and Federal programs for preserving and managing water resources. It is thus the Committee's intent that section 101(g) should be interpreted so that restrictions resulting from State water laws cannot be used to disapprove State jurisdiction over the NPDES program or other programs. Resolution of potential conflicts can better be addressed in the context of specific permit proceedings, which take into account individual circumstances that may vary widely."

APPENDIX A

EXAMPLES OF THE EFFECT OF WATER QUALITY STANDARDS ON WESTERN WATER

A GENERAL EXAMPLE

As a practical matter the standard-setting process has broken down -- at least in the arid west -- because of the great frequency with which industries have been asked to install treatment systems that are "better" than what EPA has defined as being "best." At a minimum, this creates confusion and uncertainty and unreasonably increases the cost of compliance. At worst, it can lead to shutdowns and prevent industries from locating or expanding their operations in desirable areas.

This breakdown is the result of several practical problems in the way EPA and the states have implemented the standard-setting process. As a result of these problems, standard-setting agencies in the arid west tend to set ambitious goals that, more often than not, cannot be met though a reasonable level of control.

To better understand the problem, consider the following example. Suppose that State X has decided to establish water quality standards for all "navigable waters" within its borders. The first thing it will probably do is adopt "statewide" standards, applicable to all waters of the state. This was done by most states in the early and mid-1970's. The current impact of these standards is generally minor.

Next, the state will probably adopt a system for assigning more restrictive, site-specific standards.

For use classifications, the state will create a set of categories which describe beneficial uses of water, and which correspond more or less closely with identifiable criteria. Common examples are "water supply," "agriculture," "recreation," "aquatic life," etc. The state will also create a procedure for assigning these classifications.

For criteria, the state will probably adopt a table of maximum suggested pollutant levels for each standard use category. These criteria will be based on guidelines published by EPA pursuant to Section 304(a) of the Clean Water Act. The state will also sanction the adoption of less restrictive criteria (i.e., it will permit higher in-stream pollutant levels) if the designated uses are "in place", and "existing ambient conditions" support those uses. Having adopted this system, the state will begin the process of assigning standards to specific waters. First, it will probably subdivide the state geographically according to drainage basin. Next, it will assign a schedule for conducting standard-setting proceedings.

Suppose the state has elected to commence with the Y River Basin. It will first take a map of the basin and divide the river and its tributaries into "segments", that is, areas designed to have a single set of standards. These are usually many miles long. Next, employees of the state will inspect each segment and propose classifications based on the uses they see in place, and any others that appear desirable according to local land use plans. Finally, they will propose numeric criteria to go along with the use designations. When this process has been completed for every segment in the basin, the state will propose the standards as an administrative rule.

For the purpose of this example, suppose that you are an industry located on a small tributary to the Y River. Let's assume that the tributary is about five miles long, and you are one of two industries discharging to this stretch of the stream. Upon reviewing the state's proposal you see that this segment (designated as Segment 4 of the Y River Basin) is to be classified as "Cold Water Aquatic Life -- Class I." Under the state's classifications scheme, this means that the stream should be capable of supporting a high quality cold water fishery. Upon reviewing the proposal further, you find that copper is the limiting parameter for this type of fishery. Thus, the state has proposed a numeric limit for copper of 0.005 mg/l. This is the "table number."

Upon completing your review, your first question is, "How will this proposal affect me?" After some reflection, you will probably conclude that you cannot tell. You know that the proposals might affect your ability to discharge copper, but you can't predict the likely extent of the effect. Under the best possible scenario, the proposal won't affect you at all, and your discharges of copper will be limited solely by BPT and BAT. Thus, for instance, if you are a mining company, your discharge will be able to contain 0.30 mg/l of copper as a daily maximum, and 0.15 mg/l as a 30-day average. Under the worst possible scenario, your discharge will only be able to contain 0.005 mg/l of copper -- sixty times more stringent than the daily maximum attainable with BAT.

In order to determine where in between these two extremes your discharge limit might fall, certain assumptions have to be made about available dilution flows, mixing zones, background loading from non-point sources, and allocation of the allowable daily waste load among the two point source dischargers. As a practical matter, these assumptions can only be determined after detailed negotiations with the state permit writer. However, upon calling the state, you discover that the permit writers won't be participating in this hearing -- the state's evidence will be limited to matters directly relating to ambient water quality, not the effect of the proposed standards on dischargers. Furthermore, because of their busy schedule, the permit writers won't have time before the hearing to discuss the effect of the proposal on your discharge.

Placed in this situation, all you can do is assess the likely impact of alternate scenarios, i.e.,, what it might cost to meet different effluent limitations that might result from the proposal. Suppose you decide that certain scenarios will require the company to incur substantial additional expense. How do you oppose the proposal? The first thing you will probably do is conduct a review of uses on the stream -- in this case, the status of the aquatic life. You will probably find that the quality of this aquatic life is variable. For instance, a good fishery probably exists upstream of both discharges, but the diversity and population size declines noticeably in the vicinity of the first discharge. This fishery then recovers somewhat as you proceed downstream until you reach the second discharge, where very little aquatic life can be found. As you proceed further downstream to the end of the segment the fishery improves slightly, but it never attains the vigor of the upstream population.

Next, you will probably sample water quality at various points in the segment. It is likely that population levels will correlate inversely with the quality of the fishery -- i.e.,, copper will be low above both discharges, increase noticeably in the vicinity of the second discharge, and then recover slightly as you near the end of the segment.

In light of this evidence, you will probably argue that the proposed standard should be rejected because it fails to accurately reflect existing conditions, at least for the segment as a whole. However, this argument is almost sure to fail, for the following reasons:

1. The standard-setters will point out that a high quality fishery does, in fact, exist in some parts of the segment.

2. Based on this fact, they conclude that a high quality fishery could exist throughout the entire segment if it weren't for the two industrial discharges. In this regard, they interpret "existing ambient conditions" to refer not to the conditions that actually exist in the stream, but to conditions that would exist in the absence of man-made discharges.

3. In light of this situation, they conclude that the higher standard should be considered the "norm." (See 43 Fed. Reg. 29589, July 10, 1978). They suggest that they will adopt "relaxed" standards only if the higher standards are "unattainable" technically, or because they would lead to severe economic dislocation because of plant closures.

When you ask for the source of this latter policy, the standard setters will almost surely point to EPA's grant regulations, 40 CFR Part 35, and the process by which standards are reviewed by the agency. It is likely that the state water program is funded largely though EPA grants. Since implementation of EPA's "fishable, swimmable" policy has traditionally been a grant requirement, it is unlikely that the state will risk the loss of federal money by refusing to go along. This puts you in a dilemma. You probably can't prove that the standards are "unattainable," because you don't know the precise immpact they will have on your discharge permit. Furthermore, even if you could predict these impacts, it is unlikely you could show that the standards were "unattainable" -- it is more likely you would simply think them to be unreasonable. Thus, it is likely that the higher standard will be adopted.

Suppose the higher standard is, in fact, adopted. What happens next in the permit proceeding depends on the precise relationship between your discharge, other discharges, and streamflow conditions. If streamflows are typically high in relation to discharge flows, as they often are in wetter regions of the country, then the standards will have little or no impact. For instance, if the average flow of your discharge is 10 cfs, and the Y River rarely flows less than several hundred cfs, your discharge will be limited by BAT. However, receiving streams in the arid west generally suffer extended low flow periods. Thus, effluent limitations for major industries more often approach water quality standards than BAT guidelines.

What happens when a state proposes these low effluent limitations, which are generally beyond the discharger's existing treatment capacity? Section 302(b)(1)(C) of the Act suggests that if the limitations cannot be met, the source should be shut down. In a classic "Catch-22," economic issues generally cannot be raised during the permit process. The results are rarely so draconian, but they can nonetheless be costly. Generally, permit writers will devise a "compliance schedule" for meeting the water quality based limits. This can have one of two effects. If the discharger elects to go ahead and install the requisite treatment, he will retain his right to discharge, but he will have spent a lot of money in a manner that is unlikely to be cost-effective. If the discharger decides that he can't meet the limits, then the dispute has only been delayed. Upon expiration of the schedule, the discharger must once again attempt to change the underlying standards, using new information he has generated during its term.

As noted above, it is not necessarily unreasonable to make dischargers comply with water quality based effluent limitations. Thus, compliance schedules aren't always objectionable. However, in the arid west, perhaps the majority of major industries are required to investigate the use of technologies that are "better" than "best". This practice is wasteful, and strongly suggests that economic and technical limitations are inadequately addressed in the standard-setting process.

TWO SPECIFIC EXAMPLES

A. Hecla Mining Company's Star Mine facility, Burke, Idaho (currently shut down), faced a problem in obtaining renewal of an NPDES permit where a variance had been requested for copper from water quality standards and BPT limitations. Although Hecla Mining Company followed all conditions prescribed in existing regulations, we were unable to achieve prescribed standards. EPA analyzed the data on copper ~~within our~~ effluent and concluded that there was substantial correlation to indicate the formation of a complex ion that could not be removed by normal precipitation practice. Although this complex was much less toxic than copper in the free form, EPA would not grant a variance from existing regulations. An adjudicatory hearing plagued Hecla for six years, until the Star Mine faced final closure. This strict adherence to arbitrary standards was a contributing factor in the closure of the Star Mine.

B. Waters emanating from Hecla Mining Company's Sherman Mine, Leadville, Colorado, consist of natural snowmelt. This water has been monitored since 1973, and meets Colorado drinking water standards, since the water is used as a source of public drinking water.

The Colorado Department of Health currently issued an NPDES permit using the receiving stream's water quality standards as permit parameters. These standards are approximately equivalent to detection limit values. Years of data indicate that the receiving stream will never meet these standards, yet Hecla Mining Company is forced to either comply with these arbitrarily set standards or litigate the case. Costs in either case are prohibitive for a mine that has been closed for one year due to economic hardships.

CASE STUDY OF PERMIT LIMITATIONS BASED ON WATER QUALITY STANDARDS

RICO PROJECT
January 1983

The Rico property was purchased by Anaconda Minerals in 1980 as an exploration site. A mine water discharge is associated with the site and is covered by a Colorado NPDES permit. The permit limitation for zinc was not being met. The permit in force at the time contained a zinc limit of 1.0 mg/l maximum and a 0.5 mg/l average. The State issued a Notice of Violation including a requirement that Anaconda Minerals submit a program to bring the discharge into compliance. Anaconda performed treatability studies and proceeded with conceptual design and detailed engineering for a water treatment plant. This NPDES permit expired on December 31, 1981; the new proposed permit (renewal) contained a water quality based standard for cadmium. Monitoring by Anaconda for silver and mercury was also proposed by the Agency for possible insertion of a permit limitation (at the Agency's discretion) for these metals at a later date. The proposed effluent limitations for each of these parameters are shown below:

Cadmium	0.0004 mg/l
Mercury	0.00005 mg/l
Silver	0.0001 mg/l

These limitations are based on calculations which assume that the maximum flow from the water treatment plant as designed will occur simultaneously with the minimum flow (Q7-10) in the Dolores River. Existing in-stream concentrations for the various parameters, which are the basis for the Agency's proposed effluent limitations, were obtained from a water quality survey performed by Anaconda.

Anaconda is presently attempting to negotiate changes in the proposed permit. Major points of discussion are:

- Permit does not consider actual flow conditions, i.e., ratio of flow from discharge vs. flow in the Dolores River (maximum mine discharge rate normally corresponds to maximum stream flow, rather than the opposite).
- Technology does not exist to achieve the removal required.
- Concentrations are at or below analytical detection limits.

It should be noted that aquatic insect studies show no impact of the existing discharge on the benthic community in the receiving stream. Since the water treatment plant will reduce the zinc concentration (which now reaches 6.0 mg/l on some occasions) in the effluent to less than 0.5 mg/l and should reduce the cadmium concentration by about 50%, any potential impact of the discharge on the river system should be reduced dramatically.

This is an existing discharge and through additional in-stream sampling and discussions, we may be able to reach agreement on a revised cadmium limitation; this is unlikely in the case of mercury and silver. If this were a new facility, this problem could prevent the project from being constructed.

A basic question is: Should a regulatory agency have the right to put into a permit effluent limitations which cannot be measured and which are not achievable by applicable treatment methodologies?

Also, should any company be required to spend well in excess of $1.0MM on a treatment facility knowing that the facility cannot meet all of the applicable effluent limitations and that the company will have to apply, soon after construction, for a variance for the new treatment facility?

TESTIMONY OF THE HONORABLE TIM DOUGLAS

Mayor of Bellingham, Washington

On behalf of

The Coalition for Clean Water

Mr. Chairman:

I am Tim Douglas, Mayor of the City of Bellingham, Washington, and am representing the Coalition for Clean Water. The Coalition is an association of local government entities which was formed this year to provide a coordinated effort to deal with water quality problems in the State of Washington. Our members include all of the major operators of municipal wastewater plants on Puget Sound and throughout the state.

GENERAL CONCERNS

The coalition supports the long-term goals of the State of Washington to protect its most critical bodies of water for the health, safety, and enjoyment of its people and the economic uses of its water. We also recognize Federal objectives and consequently support reauthorization of the Clean Water Act.

Our major concerns are twofold. One is the availability of continued Federal funding for the construction of secondary treatment plants and combined sewer overflow correction projects. The second is the preparation of a comprehensive, coordinated plan for protecting the water quality of Puget Sound and for providing a blueprint for achieving those water quality goals in the Sound. On the question of funding, current estimates are that $1.3 billion in 1984 dollars will be required for all water quality enhancement needs throughout the state between now and 1997. $600 million is needed for secondary treatment and $300 million is needed for combined sewer overflows alone.

I would like to concentrate the bulk of my testimony on two issues - the needs of Puget Sound as a major estuary and the need for continued Federal funding of the construction grants program.

PUGET SOUND

Puget Sound is one of the major estuaries in the country, with beautiful waters and lands and abundant natural resources. The Sound is a vast estuarine system with extensive tidal flushing, the constant influx of large amounts of fresh water, and a highly productive biological system. Puget Sound and its adjacent waters include the main basin, the more isolated South Sound, the Hood Canal, the waterways of the San Juan Islands and the eastern end of the Strait of Juan de Fuca in both Canada and the U.S. The waters are complex in both physical and biological characteristics. The Sound itself is deep, with an average depth of 550 to 600 feet, and similar to a fjord in many parts. Biologically, it is both a single major ecosystem and a collection of interdependent, smaller ecosystems.

The Sound and its adjacent waters are also complex in their government and management structure. The governmental institutions with responsibility for water quality include six

Federal agencies, five state agencies, 100 cities, 40 port districts, twelve counties, 100 water districts, forty-two sewer districts and many others.

The natural characteristics of the Sound require that these government bodies deal with water quality in Puget Sound as a single, common problem. Our Coalition was formed because of our recognition of that common problem and the need for a coordinated, comprehensive solution to the problem. The construction of secondary treatment facilities in Seattle, Bellingham or Tacoma alone will not solve the water quality problem in the Sound. In fact, the construction of secondary treatment facilities throughout the Sound is only one strategy among many important options to achieve State and Federal clean water objectives in this virtually important area. We must work together and we must address all sources of pollution in Puget Sound.

NATIONAL ESTUARY PROGRAM

The National Estuary Program contained in your bill, S. 652, is a clear recognition of the special problems and concerns of major estuaries. We appreciate your understanding of the special nature of major estuarine systems and the need for a targeted program to produce solutions. We agree with your statement in introducing the bill that an initiative must be taken now if Puget Sound, Narragansett Bay and similar estuaries are to be able to continue to supply the recreational and economic resources which they currently provide.

The Coalition supports the establishment of a management conference or committee to create a coordinated, comprehensive plan for achieving water quality objectives in Puget Sound. As indicated in your bill, the conference should be authorized to make lists of priority actions and schedules of compliance dates for implementing pollution control methods. Following approval of the comprehensive estuary conservation and management plan by the EPA Administrator, with the concurrence of the Governor, the plan should become the single standard for all decision-making on water quality permits by the Federal, state and local entities. Canada, as a participant in the Puget Sound management conference, should also agree to be bound by the plan once it has been approved through necessary government channels in Canada.

On this last point, we propose amending Section 320 in your bill to make it clear that the compliance schedule contained in a comprehensive plan would become the legal compliance schedule for purposes of the Clean Water Act after approval of the plan by the Administrator. Given expected levels of available funding from all sources over the next decade and the priority of actions for protecting the Sound, it is not possible to comply with the current 1988 date for construction of secondary treatment facilities throughout Puget Sound. Combined sewer overflows and pollution from non-point sources require attention and substantial funding. A comprehensive plan with an agreed compliance schedule, however, would provide a feasible program for secondary treatment construction while also ensuring that all of the necessary facilities will be built. We would be happy to work with you and your staff on amendment language.

The State of Washington has already recognized the need for coordinated research, planning and action to deal with water quality in Puget Sound. A Puget Sound Water Quality Authority already exists in the state and pending legislation would give it the responsibility for developing a comprehensive state plan for the Sound. Our Coalition is providing a coordinated effort by local entities dealing with wastewater treatment, aquifer protection, etc. A coalition of nine ports on Puget Sound is working with the Corps of Engineers and the EPA on the preparation of an Environmental Impact Statement on the disposal of dredged material in the Sound. A state government representative, a member of our coalition, and a representative of the port coalition testified last week before the House Oceanography Subcommittee on the need for continued coordinated Federal marine research in Puget Sound to support regulatory decision-making.

We support the objectives of your National Estuary Program and are ready to begin implementation in Puget Sound.

FUNDING

On the issue of funding for secondary treatment facility construction, the continuation of the Federal/state/local partnership is key to achieving our water quality objectives. The State of Washington needs $1.3 billion in 1984 dollars for water quality enhancement over the next ten to twelve years. Even with the continuation of low inflation rates, the total could climb to two billion dollars or more before all of the construction is completed. Governor Booth Gardiner has proposed legislation in the Washington legislature to authorize a $450 million bond issue for working on the state's water quality problems including secondary treatment, combined sewer overflows, non-point source controls, and the protection of sole source aquifers. Although the state is close to its authorized bonding limit, the Governor has declared the clean-up of Puget Sound and the solving of the other water pollution problems in the state to be a top priority. Secondary treatment of wastewater will require $595 million in current dollars for construction of all of the needed facilities. The state legislation is predicated on a 25% state share of the total funding for these pollution prevention projects while local interests generally expect to provide 50% of the overall cost. The Federal share in the partnership must continue to be available. The members of our coalition recognize the importance of secondary treatment and are prepared to pay their share of the cost. However, sewer rates in much of the state are already high and could double or triple, depending on the amount of Federal assistance available to supplement local and state funding.

We realize that the Congress is wrestling with a very difficult problem of trying to cut the Federal budget deficit while maintaining Federal programs. However, we are required by Federal law to provide secondary treatment of wastewater at a very high cost. We believe that the Federal Government must continue to provide substantial funding to enable us to comply with Federal requirements. These expenditures are one-time capital costs and are not an endless Federal committment. A foreseeable end to the funding need does exist and can be predicted. Local governments will continue to pay all of the costs for maintenance and operations of plants and for growth-related construction. This is a major committment to water quality. We support the water quality goals of the Clean Water Act but we must maintain our funding partnership if we are to achieve them.

Thank you.

National Audubon Society
NATIONAL CAPITAL OFFICE
645 PENNSYLVANIA AVENUE, S.E., WASHINGTON, D.C. 20003 (202) 547-9009

STATEMENT OF HOPE M. BABCOCK

DEPUTY COUNSEL AND DIRECTOR OF PUBLIC LAND AND PUBLIC WATER PROGRAM

NATIONAL AUDUBON SOCIETY

BEFORE THE

ENVIRONMENTAL POLLUTION SUBCOMMITTEE

OF THE

SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

MARCH 28, 1985

My name is Hope Babcock. I am Deputy Counsel of the National Audubon Society and Director of Audubon's Public Lands and Waters Program. Audubon is a nationwide, nonprofit organization of over one half million members dedicated to the wise use and conservation of our natural resources and protection of the environment. A high priority of our members is protecting the quality of our nation's waters. Therefore, I particularly appreciate this opportunity to testify.

Audubon supports S. 53 and S. 652, but we would like to see certain strengthening changes made in those bills, as I will testify today. Audubon opposes the Administration's package of proposed variances, stays and extensions.

I will confine my comments to two areas of particular concern to Audubon: nonpoint source pollution and the declining health of our estuaries. I briefly mention one other important toxics issue at the end of my testimony, occasioned by a recent U.S. Supreme Court decision, and respond to the Administration's proposed variance for coal remining.

Much has happened since Audubon first testified two years ago before this Committee on nonpoint source pollution control. There is now, as there was not then, broad-based agreement on the need to begin the process of controlling this serious source of pollution of our nation's waters and even suprising agreement on the process itself. Appreciation of the costs of nonpoint source pollution, calculated to be as high as $6 billion per year for erosion-related pollutants [Edwin H. Clark, II, "The Off-Site Costs of Soil Erosion," Journal of Soil and Water Conservation (January/February 1985), p. 23, at 26)], and the national extent of the problem, has helped forge that consensus. The U.S. Environmental Protection Agency reports that based on the the 1982 state §305(b) biennial water quality reports "virtually all states have some water quality problems caused by nonpoint sources." [Carl F. Myers, James Meek, Stuart Tuller, and Anne Weinberg, "Nonpoint Sources of Water Pollution," Journal of Soil and Water Conservation (January/February 1985), p. 14]. It seems clear that the country cannot afford to wait any longer before initiating the necessary controls on nonpoint pollution. We are pleased to infer from S. 53 that you agree with us that we can wait no longer.

Audubon supports the nonpoint source control program set forth in Section 319 of S. 53, though we believe that the program could be made stronger. The proposed program represents a balanced compromise, a workable combination of incentives and requirements, which should enable the process of controlling nonpoint source pollution to start. I emphasize the word "start." I think we all appreciate that this program will only start the process at the national level of addressing this troublesome form of pollution. We may well need to take a second, and even third look at how we go about the task of abating nonpoint source pollution as we gain experience under this program.

With regard to the specifics of the program set forth in Section 319, Audubon would like to propose for this Committee's consideration some modest ways in which the proposal might be made more effective without going beyond what makes practical sense at this point in time.

First, we ask the Committee to consider adding implementation of nonpoint source pollution control to the list of national policies set forth in Section 101. This would be more than a symbolic amendment. The goals and policies of the Clean Water Act are, in many respects, the law's driving force. It is clear that the Act's goals cannot be met without significant abatement in nonpoint source pollution. Making achievement of nonpoint source pollution control an explicit national policy will integrate the nonpoint source control program into the Act's other requirements. Doing this will mean, for example, that when States set water quality standards which must meet the goals and purposes of the Act, they will have to consider the effects of nonpoint source pollution. Adopting this amendment can only increase the reach of the program and its effectiveness.

Second, Section 106 of S. 53 proposes to amend Section 303(c)(2) of the Act to require states to adopt criteria for all toxic pollutants listed pursuant to Section 307(a)(1) of the Act. We applaud this amendment, in part because of its impact on the nonpoint program described in Section 319. The proposed nonpoint program is premised upon States having sufficiently comprehensive and stringent water quality standards. In other words, a state's nonpoint program will only be as good as the state water quality standards against which it is measured. Therefore, improving the scope of these standards can only improve the effectiveness of the nonpoint program.

Audubon is concerned, however, that limiting the scope of this amendment to just the toxic pollutants listed pursuant to Section 307(a)(1) will not reach many of the pollutants of particular concern with regard to nonpoint source pollution. For example, such a list would not include pesticide residues or fertilizers, both found in significant quantities in runoff around the country. We ask the Committee to consider broadening that cross-reference to include any pollutant for which EPA has issued a guideline under Section 304(a)(1) of the Act. This will assure that the pollutants of concern in the nonpoint source area will be adequately addressed by the nonpoint program.

Third, there is increasing evidence of a relationship between nonpoint source pollution and groundwater contamination. The most dramatic recent example of this is one we have occuring in California at the Kesterson Wildlife Refuge where high levels of selenium, arsenic and heavy metals have been found in the Refuge's reservoir as a result of agricultural drainage in the San Joaquin Valley. Kesterson is not the only instance of this, however. A dozen pesticides, including herbicides, have been detected in a northwestern Ohio agricultural watershed from which drinking water is drawn. High levels of pesticides have been found in tap water which correlate to levels in rivers serving as sources for raw water. Nitrogen-N levels in Nebraska's groundwater are twice the national drinking water standard for that pollutant. Nitrate levels in Iowa reached such high levels in May of last year that two state agencies, the Iowa Department of Water, Air and Water Management and the Health Commissioner, debated over whether or not these consistently high levels posed a health threat to babies. A recent study in Colorado reported in the Environmental and Energy Study Institute Staff Report, entitled "Groundwater Protection: Emerging Issues and Policy Challenges," revealed that between 25 and 30 pounds of nitrogen is lost to groundwater for each acre of fertilized soil.

This relationship could pose a serious health problem, especially in the rural areas of our country. Excessive levels of nitrogen, for example can reduce the oxygen carrying capacity of blood which can lead to oygen deprivation or, in extreme cases, to asphyxiation (the "blue baby" phenomenon). Farm families drink most of their water without treatment and rural water supplies are seldom checked for purity. Many farm families draw drinking water from relatively shallow aquifers that are recharged by infiltration through porous soils. These aquifers are, therefore, particularly susceptible to contamination from nitrates, pesticide residues and other water soluble pollutants. Intensified irrigation and farming practices employed around the country are increasing the rate at which these materials may be moving into groundwater. The U.S Department of Agriculture projects a usage of approximately 1.25 million tons of pesticides in 1985 [U.S. Department of Agriculture (1980) RCA Appraisal 1980: Review Draft, Part II. Washington, D.C.: USDA, as quoted in an article by R. Neil Sampson, Executive Vice President American Forestry Association, "Human Health and Water Quality as Related to the Uses and Managment of Water for Agriculture." Copyright 1985 Praeger Publishers]. The National Research Council estimates that there are some 3,350 chemicals involved, of which only about 10% have undergone complete health hazard assessment [U.S. National Research Council, 1984. Toxicity Testing. Washington, D.C.: National Academy Press, as quoted in the same article by R. Neil Sampson].

While it is true that the full extent of the relationship between nonpoint source pollution and groundwater contamination is not yet fully understood, it is important that the program set forth in Section 319 not make matters worse by inviting implementation of best management practices that would adversely affect groundwater. Therefore, we have recommended that the Committee consider two additional minor changes to Section 319.

The first of these would direct states, in the identification of best management practices, to consider the impact of those practices on groundwater. For example, holding water on a a farm field or slowing down the rate at which it crosses that field increases the opportunity for that water to percolate through the soil to groundwater. If our proposed change were adopted by this Committee, it might mean that farmers in porous soil regions with high water tables would be discouraged from employing what under different circumstances might be best management practices, like sedimentation basins or conservation tillage, which hold water on fields. Our second proposal would allow the Administrator of EPA to use the discretionary funds authorized in Section 319(d)(2)(B) to assess the relationship between runoff and groundwater contamination. Out of such efforts might come greater understanding of the dimensions of the problem.

Fourth, we ask the Committee to consider amending Section 319 to make it clear that the states may not use monies already committed to pollution control activities for their share of the program's funding. We do not want to see States shift resources between water pollution problems in order to attract additional funds available under this program. A participating State should be required to maintain its existing level of commitment to water pollution control as a condition precedent to receiving any new funds under the nonpoint program. This could be done by requiring that states maintain their aggregate expenditures for controlling pollution in their waters at or above the average level of such expenditures in the two fiscal years preceding the date of the amendment's enactment.

Fifth, we are concerned about the source of funding for this program in these years of deficit federal budgets. The bill proposes authorizing $300 million for the program's three-year duration. While we support the authorization of this money, we are not unmindful of the action taken by the Senate Budget Committee a few weeks ago freezing spending at last year's levels. That is why we support the structure of Section 319 as requiring each state to submit a nonpoint source program; a requirement that exists regardless of whether the money is authorized or appropriated. However, it is also clear that some money will be necessary to assist both the states and EPA to implement the program. EPA has not requested any funds for implementation of its recently issued nonpoint source policy in its FY 86 budget request. The agency had originally proposed using Section 106 funds for this purpose, but seems to have abandoned that idea in this environment of fiscal austerity.

To help with this problem, we ask this Committee to consider opening up the discretionary category of funding under the construction grants program to authorize states to use those funds to implement approved nonpoint source management programs. There is an external logic to this request. Nonpoint source pollution poses a serious problem for publicly owned treatment work facilities. Therefore, these funds should be released to the Governors to spend of the control of nonpoint pollution as warranted in their judgment.

I would now like to turn to Section (a)(1) of the Chairman's bill, in which he proposes the creation of a national estuary program. Let me start by saying that we are delighted with the proposal. Our nation's estuaries are in serious trouble. For too long, they have been the dumping grounds of much of our national waste. The Clean Water Act simply does not provide the necessary tools to address complex, large, often regional, ecosystems like estuaries.

The Chesapeake Bay has been the most visible of the bays in trouble, but by no means the only one. High concentrations of coliform bacteria have forced the closing of sections of Mobile Bay to shellfish harvesting. In San Francisco Bay, localized heavy concentrations of mercury, lead and gold from Silicon Valley, salt water intrusion and destruction of wetlands pose a significant threat to aquatic life. There is also strong evidence that pesticides and fertilizers washing in from the Sacramento and San Joaquin rivers are causing infertility in striped bass, resulting in population declines in that species in the last decade in excess of 50% -- not unlike the decline in striped bass here in the Chesapeake.

Our estuaries are disappearing, much like our wetlands. Over one million acres in estuarine habitat has been lost nationwide since 1960. California recorded a 67% decrease in basic estuarine habitat between 1950 and 1967, when indiscriminate filling was finally halted by the State.

There is an urgent need to protect these vital natural resources from pollution and overuse before it is too late. The Chairman's proposal will go a long ways toward meeting that need by establishing a program which will (1) cover enough of the estuarine watershed to bring under management control the most important of the activities contributing to the estuary's decline; (2) provide a management framework under which States, in partnership with the

Federal Government, can come together to develop an enforceable plan to protect the estuary; and (3) provide financial assistance to those States involved in the management plan for implementation of pollution control measures, monitoring the health of the estuary and the effectiveness of the controls, and for conducting necessary reseach. We do have a few changes to Chairman's proposal, which we ask the Committee to consider when it evaluates this critically important program.

We would like to see increased opportunities for public participation in the process of both convening an estuarine management conference and of developing a plan. Toward that end, we ask that the bill be amended to authorize citizens to comment on the plan that is submitted to the Administrator for approval and to petition the Administrator to convene an estuarine management conference.

Second, we are concerned that bays which are not subject to multi-state jurisdiction, like San Francisco Bay or Puget Sound, will not be able to participate in the program, because they will not be able to make the showing required in Section (a)(1) with regard to interstate or international control of sources of pollution. Accordingly, we ask the Committee to consider authorizing the Administrator to convene an estuarine management conference upon the request of a single State or of a federal agency when it can be determined that there is a need for coordination between federal agencies or between federal and state agencies.

Third, the bill should make clear that any corrective actions or compliance schedules proposed in the conservation and management plan must be at least as stringent as or more stringent than existing requirements. In other words, the result of participating in this program should be a regimen of controls for an estuary that is consistent with and in addition to those that would otherwise be in place in the individual States without the program. While this fundamental concept is implicit in the proposed Section, it should be made explicit to avoid any future confusion.

Similarly, we suggest that the Committee also clarify that in areas where effective estuarine management programs are under way, like in the Chesapeake Bay, the application of this program should not require those states to start anew, but should enable them to take advantage of whatever additional resources and authorities this program would give them.

Before I conclude my testimony, I would like to address briefly two other issues, namely the need to amend the Clean Water Act to overturn the recent U.S. Supreme Court decision in Chemical Manufacturers Assn., et al. v. Natural Resources Defense Council, No. 83-1013, Slip Op (February 27, 1985) and the proposed variance for coal remining operations.

In the Chemical Manufacturers decision, the Supreme Court affirmed (5-4) EPA's application of the so-called "fundamentally different factors" variance (FDF variance) to the Act's pretreatment program. We believe that, contrary to the Court's opinion and as stated by the dissenters, Congress did not intend there to be any toxic variances of any kind when it enacted the Clean Water Act in 1972, and that Congress affirmed that intent when it amended Section 307, in 1977. Accordingly, we ask Congress to correct this misunderstanding by amending Section 301(l) of the Act to bar the application of FDF variances to toxic discharges.

I now move to my final area of comment, the Administration's proposed variance for coal remining operations. The Administration has proposed a broad, largely unrestricted variance from national effluent limitations for coal remining operations, which we oppose. While we do not disagree that there is an important, albeit limited problem concerning pollution from some abandoned coal mine sites and that incentives should be considered where appropriate to encourage reclamation of those sites through their remining, the Administration's response is well beyond what is needed and will only serve to further devastate an already devastated region of the country, Appalachia.

It is important to realize that the proposed amendment relaxes water pollution controls required not only by the Clean Water Act, but also by the Surface Mining Control and Reclamation Act of 1977. The proposed amendment may go even further in relaxing important other hydrological and reclamation requirements of the Surface Mining Act, because of the interrelationship between that Act's pollution control requirements and its hydrologic and reclamation requirements.

It is also important to appreciate that this is not an insignificant proposal by the Administration. There are approximately 400,000 acres of abandoned mines containing economically recoverable coal. A significant percentage of the mining activity occuring in this country today occurs at abandoned coal mine sites, because of the economic advantages associated with reworking an abandoned site as opposed to opening up a new area. Acid drainage and erosion from unreclaimed abandoned mines cause severe water quality degradation that persists long after mining has ceased, in some cases rendering entire watersheds biologically dead. To date, acid mine drainage has damaged over 11,000 stream miles.

The Administration's proposed variance for coal remining activities will only exacerbate this situation. First, the variance applies to large operations, like those that remove entire mountain tops, which have no difficulty meeting existing effluent limitations. Second, the proposed amendment does not limit the extent of the variance to the lowest achievable pollutant level for the discharge effluent; instead it allows remining operations to pollute up to the level of pollution existing when the remining operation began. Third, the amendment fails to distinguish between old and new discharges at a remined site, which are often comingled, giving unwarranted relief to new mine workings. The amendment, however, does create a fictitious distinction between so-called "unencountered" and "encountered" waters, proposing to regulate only the latter. This Steven Speilberg concept has no foundation in hydrologic reality -- there are no "unencountered waters," except when you mine around them and, therefore, don't "encounter" them. Incorporating this fiction into the Clean Water Act, however, will legitimize the illegal practice of mining around existing discharges to avoid the burden of reclaiming these areas to meet national effluent limitations. Last, by broadly defining "coal remininining operation" to include any "site at which coal mining operations have occured in the past," the proposed amendment grants relief beyond what is appropriate by including operations which have been illegally abandoned since enactment of the Surface Mining Act.

Any relief the Committee might consider, should, at a minimum, require:

1. coal mine operators to use best available technology to limit pollution to the lowest levels possible. This could be accomplished on a site-by-mine-site basis using best professional judgement;
2. that any variance apply only to that portion of the remining operation that is occuring in a previously mined area, and not to mining in related virgin areas;
3. the amendment to be interpreted in pari materia with the requirement in the Surface Mining Act to maximize coal recovery to ensure that the boundaries for coal remining operations are not drawn to exclude existing discharges -- ie, the "unencountered water" concept;
4. that the amendment not authorize a variance for mountain top removal operations;
5. that the remining operations eligible for this form of relief be restricted to those occuring at sites which were abandoned before enactment of the Surface Mining Act; and
6. that the amendment neither affect OSM's authority to regulate water quality from coal remining operations except with regard to the specific pollutants mentioned in the amendment (iron, manganese and acid), nor the states' ability to set water quality standards under Section 303 of the Act.

If these basic principles are observed, then some relief from national effluent limitations may be appropriate in this area. Our recognition of this led us to support a similar provision in H.R. 3282, which passed the House of Representatives last session. That provision, incidentally, had the support of Congressman Udall as well.

Thank you for your attention to my remarks. I would be pleased to answer any questions that you may have.

League of Women Voters of the United States • 1730 M Street, N.W., Washington, D.C. 20036 • (202) 429-1965

TESTIMONY BEFORE THE SENATE WATER POLLUTION SUBCOMMITTEE
RECOMMENDATIONS TO IMPROVE THE CLEAN WATER ACT
BY
MERILYN B. REEVES, BOARD OF DIRECTORS
LEAGUE OF WOMEN VOTERS OF THE UNITED STATES
MARCH 28, 1985

I am Merilyn B. Reeves, member of the Board of Directors of the League of Women Voters of the United States. I am testifying today on behalf of a quarter of a million League members and supporters from across the United States. The League has long been active on natural resources issues through the work of our 1,300 local Leagues.

Since the 1950s, Leagues have been concerned about the need to develop effective programs for water management, water planning and protection of water quality. Reflecting this concern, many Leagues in the 1970s worked closely with designated agencies in developing the comprehensive areawide water quality plans required by Section 208 of the Clean Water Act.

As you know the focus of these plans was on identifying sources of nonpoint pollution and potential methods of control. But since the federal directive required planning only, not implementation, after years of work and the expenditure of federal funds, many of the 208 plans ended up on the shelf.

As a result of their involvement in the 208 process, Leagues have been particularly aware of the water quality problems caused by nonpoint pollution and disturbed by the lack of action to curb this growing pollution source. We think that the program outlined in S.53, with strengthening provisions, could be a significant start in controlling nonpoint problems. We will direct most of our remarks to this issue.

Before I begin discussion of our proposals to control nonpoint source pollution, I would like to touch briefly on two other issues.

First, the League of Women Voters strongly urges this subcommittee to retain the current 5-year length of National Pollution Discharge Elimination System permits. The National Wildlife Federation has already testified at length on this issue, so I will not repeat the details of this problem. However, we do agree with their arguments that the provisions for reopening permits in S.53 would still allow pollution to be locked in for the entire ten year length of the permits. In addition, we are concerned that since EPA currently allows 5-year permits to last 7 or 8 years, they may allow 10-year permits to last 12 or 13 years. Only by EPA speedily producing Best Available Technology guidelines will the current permit backlog actually dissipate. And make no mistake about it, lengthening these permits will be a significant and fundamental weakening of the law. These permits were named "pollution elimination" permits for good reason. They were meant to be changed, adapted and tightened as we moved towards our goal of fishable/swimmable waters. By lengthening these permits from 5 to 10 years, an incremental slowing in attaining this goal will occur. The current law should be retained.

Second, the League believes that the federal construction grants porgram should be reauthorized at least at its current levels. Water quality would be improved if the program were expanded through a revolving loan fund or additional grant money. While we believe the grants porgram was not designed to last forever, and some abuse has taken place under this program, it is an undeniable fact that unless more money is provided it will have a severe impact on gains already made under the Clean Water Act.

EPA's recent needs survey shows that as much as $108.9 billion will have to be spent on sewage treatment, with $34.4 billion of this total a potential federal investment. "Failure to meet these needs would result in severe water quality degradation," according to EPA. Even though this program should eventually be phased out completely or converted into a loan program, now is clearly not the time to make this step. The need is too urgent, the local resources are too few.

NONPOINT SOURCES

Nonpoint sources have long been recognized as a serious water quality problem. But because of the diffuse nature of the problem, the many different sources involved--including agriculture, silviculture, urban and mining--the wide variance in problems from region to region and the site-specific nature of many remedies, Congress has avoided establishing a program for nonpoint source control.

However in the past decade, through the 208 process and studies undertaken by a variety of sources we have developed a body of knowledge about the nature, extent of and potential solutions for nonpoint pollution that point to one result:

We cannot afford to wait any longer to establish effective nonpoint control programs. To list only a few of the salient facts: EPA reports that six out of ten federal regions cite nonpoint sources as the principal remaining cause of water quality problems in their region. The Conservation Foundation estimates that at least $6 billion in offsite damages are caused annually by sediment runoff from soil erosion. Staff at Resources for the Future recently compared the relative amounts of selected pollutants in surface water contributed by point and nonpoint sources and found that 90 percent of total coliforms, total nitrogen (except nitrate) and iron came from nonpoint sources as well as 60-70 percent of total phosphorous, oil and zinc. In addition, concern is growing about groundwater pollution caused by nonpoint sources, particularly pesticides, and overall pesticide use is expected to increase in coming years.

In the absence of federal leadership a few forward-looking states have set up strong nonpoint programs. But federal leadership is needed to tackle this national problem in a meaningful, comprehensive way--to ensure that all states with serious nonpoint problems take action and to protect those states that have already developed programs from inheriting pollution problems from other states as they flow downstream.

We think that S.53 does establish the basic framework for beginning to control nonpoint source pollution. In particular, we are glad to see that the bill

-- recognizes that states should have primary responsibility for program development.

-- gears federal funds to program implementation rather than planning.

-- targets efforts to those areas that cannot meet water quality standards due to nonpoint problems to ensure that our limited resources are used in areas that can realize the biggest payoff in terms of pollution reduction.

-- acknowledges the importance of federal consistency to ensure that federal activities do not at the same time promote and undercut good water quality practices.

-- promotes information transfer among states to share successful and/or unsuccessful control efforts.

-- provides for EPA to step in and begin to establish a program if a state fails to do so.

LOCAL INVOLVEMENT/PUBLIC PARTICIPATION

S.53 now provides that states may make use of local agencies and organizations in developing and managing their nonpoint programs and requires public comment before submission of plans to EPA. We would like to emphasize the importance of local input in contributing to the success of these programs. Since appropriate best management practices to control nonpoint problems are often site-specific, we hope that states will make every effort to obtain substantial local input at the earliest stages of program development. Public understanding and support are fundamental to the success of all environmental programs, but the public role in designing this program from the bottom up is critical.

While the nonpoint pollution control program in S.53 is a good first step, it suffers from two fundamental problems. First, while this program will encourage states that are already doing a good job in controlling nonpoint to do more, it provides few real carrots and sticks to get states that are currently doing nothing to act. These are the states where the most severe problems lie, and this subcommittee should consider further action. Second, even this first step may not occur because the program probably will not be funded fully, if at all, due to our current economic crisis.

However, this first problem may be partially solved by new proposals we will make in this testimony and the funding problem can be solved by resources that are at hand. As we stated in the opening of our testimony, we are in favor of retention of the current levels of Title II, construction grants funding for the current reauthorization period and the addition of a revolving loan fund. All money available under Title II, and in particular any money in a revolving loan fund should be made available for control of nonpoint source pollution where it will effectively improve water quality and is a cost efficient use of funds.

This should be done for a number of reasons. First, it would provide sure funding from a water quality related resource pool. It would also offer greater flexibility to ensure the best pollution control "bang for the buck" is achieved. Second, as six out of ten federal regions cite nonpoint sources as the principal remaining cause of water quality problems in their region, it is clear that cleaning up these sources may represent the best final increment for reaching water quality goals. This will protect the billions of dollars of prior investment we have made in cleaning up point sources.

Third, the set-aside accounts of Title II offer a national and excellent funding source for nonpoint source control. The governor's discretionary fund currently used for ineligible projects should be provided with more flexibility. Since agriculture is a major source of nonpoint pollution, the rural communities set-aside is a natural place to go for nonpoint control funds. The innovative and alternative technology set-aside also could supply a clean-up source for the 20 states currently returning I&A funds. We were deeply disappointed to see that S.53 decreases the I&A set-aside from 4 percent to 2 percent of the grants program. Though some money has been returned, we believe this has been a valuable program that has worked fairly well. EPA has awarded over 3000 grants over the life of the program which have used over 90 percent of the money allocated for I&A projects. Though 20 states returned money this still means that 30 are using it. By opening up this program to the alternative of nonpoint source control, more states would be able to take advantage of these funds. The I&A set-aside should clearly be retained at 4 percent.

The revolving loan fund offers special advantages for the control of NPS pollution. Gradually phasing the grants into loans after this reauthorization period would be greatly facilitated by adding on a loan program now for control of nonpoint sources. In addition, it would solve a philosophical problem this subcommittee has often wrestled with, whether awarding grants to individuals to control nonpoint is in effect paying them not to pollute. We feel that by giving out low-cost loans to control NPS pollution, it would provide an incentive to clean-up as well as being in line with the polluter pays principle. NPS pollution is by its nature diffuse and we favor cost-sharing grants for demonstration projects or particularly troublesome areas, but a loan approach strikes us as both cost efficient and correct as a general philosophy.

It is absolutely crucial that this subcommittee find a means for funding this program, otherwise it simply will not work and the hard work which has gone into designing it will be for naught.

FEDERAL CONSISTENCY AND COORDINATION

Many federal agencies -- the U.S. Department of Agriculture, the Office of Surface Mining, Federal Highway Administration and the various federal land management agencies to name only a few -- conduct activities that can cause severe nonpoint pollution problems if improperly planned. It is unfair and inefficient to tell states that they must clean-up while the federal government does not have its own house in order. We are glad to see that S. 53 permits states (1) to develop a list of the federal development and federally assisted activities that can have nonpoint impacts and (2) to determine whether such proposed projects are consistent with state programs. Furthermore, if a state finds inconsistencies federal agencies are required to accommodate state concerns. We think this provision gives states important, fully warranted controls over federal activities that would undercut state water quality goals.

But beyond this, we believe that the federal government has an independent responsibility to ensure that its activities do not exacerbate already serious nonpoint problems -- whether or not a state control plan is in effect. The bill now requires that, if states fail to develop a program, EPA will step in to identify waters where nonpoint pollution is preventing attainment of water quality standards and designate the pollution sources causing the problem. In these cases, we think that EPA should also be required to develop a list of federal activities and assistance programs affecting nonpoint pollution, and prohibit any such activities that would lead to more severe water quality problems in those identified areas.

Other federal agencies also should have a mandatory duty to establish how their programs may be inconsistent with controlling nonpoint source pollution. The law should also mandate that not only do the states have the right to enforce consistency, but these agencies have a mandatory duty to lessen their contributions to NPS pollution. It is time the federal left hand let the federal and state right hands know what they are doing. It is time that we stop subsidizing the creation of nonpoint pollution, only to pay once more to clean it up.

CITIZEN SUITS

In the past citizen suits have been an effective tool in expediting development and enforcement of environmental programs. We urge the committee to amend section 505 of the Act to allow suits not only against EPA but also against any governmental unit for failure to carry out its mandatory requirements established by the Clean Water Act. Without this provision, while EPA will have the responsibility to get other agencies to clean-up their act, no real authority will exist to make this happen. Citizen suits will add a reasonable and workable avenue for public participation in this process.

CONCLUSION

The League believes that the changes we have asked for in this testimony are reasonable, and given the scope of the problem, quite minor. We are convinced that four years from now the League of Women Voters will be right back in this room talking about the need to solve NPS pollution problems. With the improvements we have asked for; Title II funding, greater federal consistency and citizen suits, we feel this program may give us a good start towards solving this problem. However, without funding, without the additions we have asked for and given that the House bill is currently weaker on NPS control than S. 53, we fear this program will accomplish little in moving us towards our goal of fishable/swimmable waters for all Americans.

The time is now for forcing the development of well-designed state implementation plans, with tough sanctions for those states that chose to pollute the waters of those who live downstream.

We believe the time is now to invest our funds in cleaning up this largest remaining water quality problem; so that our children neither have to suffer the further poisoning of their surface waters with heavy metals and pesticides, the further loss of their valuable topsoils, nor pay even larger costs for cleaning up these problems.

We have suggested the bare minimum necessary to give the S. 53 NPS program a chance to work and to give this bill a chance for quick passage. We sincerely hope that you will take these concerns and suggestions to heart and improve this bill.

Testimony of

R. Neil Sampson
Executive Vice President

before the

Committee on Environment and Public Works
United States Senate

March 28, 1985

on

S. 53
The Clean Water Act Amendments of 1985

Mr. Chairman. Members of the Committee.

I am Neil Sampson, Executive Vice President of the American Forestry Association, a private, non-profit citizen's organization that has been active in the field of natural resource conservation since 1875. On behalf of our more than 40,000 members, it is a pleasure to come before you today to discuss amendments to the Clean Water Act. We will focus our attention on the portion dealing with non-point source pollution.

First, let me commend the Chairman and the Committee for including Section 112, Nonpoint Source Pollution, in S. 53. Section 112 contains language that was worked out with considerable care during the last Congress. As such, it represents an important step forward in our efforts to develop a program to manage nonpoint sources of pollution.

It also represents a significant, and courageous, departure from the long-standing approach this Committee, and the Nation, have taken to other water quality problems. Instead of trying to define what the national problem is in exact terms, and establish standards in federal law that must be met in addressing that problem, Section 112 recognizes that nonpoint source pollution must be treated from the ground up.

Rather than being predictable, measurable, and treatable, the water pollution problems associated with nonpoint sources often arise more as the result of a combination of geographic location, land treatment, and weather events. They can be only vaguely predicted, seldom measured, and never treated. They must, instead, be prevented.

Technically, we know a great deal about how to prevent nonpoint source pollution. It goes without saying that technical problems remain, but it is my judgment that these are not the major challenge facing us today. The major challenge is that we are not doing a good enough job of what we already know needs doing.

Nonpoint source pollution, if it is to be prevented, must be prevented by people — millions of people — and by the actions they take in their daily work and activity. Farmers must follow good conservation management practices on their land, particularly on cultivated land. It is this land that is most vulnerable to soil erosion that can lead directly to water pollution. In addition, they must handle chemicals, irrigation water, livestock wastes, fertilizers, petroleum and land disturbing activities in such a way that pollution opportunities are reduced or eliminated.

Foresters and loggers must design logging roads, skid trails, and other land disturbances to protect against soil movement and erosion; then look for ways to re-vegetate vulnerable sites as rapidly as possible after the timber crop has been removed. Builders must provide interim protection on disturbed sites so that a rain storm during construction does not result in soil and other pollutants being carried to nearby waters.

Homeowners, who often use chemicals and fertilizers in concentrations many times greater than those used in commercial farming or forestry, must be educated on proper use and taught how to prevent these chemicals and compounds from escaping into street and storm drainage systems.

The challenge we face is to help people understand what is needed, why it is needed, and how they can prevent pollution in ways that are practical and feasible. If we can begin to gain this kind of public understanding, the result will not only be cleaner water — we will also see great improvements in technical information and economic feasibility, spurred by the involvement of millions of people and thousands of scientists in the effort. Perhaps the greatest gain, however, will be the development of new institutional arrangements for dealing with this type of dispersed, localized pollution problem. We will see new programs at the local and state level, new cooperative arrangements that tie private citizens, companies and organizations into public programs, and new ways of interrelating federal, state and local efforts. In my view, that is the nature of the nonpoint source challenge in America today.

Based on this concept, Section 112 is an excellent legislative approach to nonpoint source pollution. It is far more indirect, in terms of federal action, than most federal environmental thrusts. That is, I believe, one of its strongest virtues. Public involvement and understanding will best be gained by getting state and local government more active in problem identification, priority setting, and the development of both public programs and land management practices that are best suited for the situations encountered in each locality.

In addition, Section 112 addresses some very complex and difficult intergovernmental issues in a constructive manner. Federal projects and actions which ride rough-shod over local land use planning or water quality management efforts have long been identified as a major problem. In too many cases, one federal agency or program encourages (or requires) performance from state or local government which is precluded or destroyed by the actions of another federal agency. Without some way to get these conflicting federal efforts to agree with each other, the local or state government is frustrated and helpless.

But efforts to make federal agencies comply with "federal consistency" requirements can lead to serious problems as well, giving local parochialism the leverage it needs to prevent federal actions that are essential for the greater good. Subsection 112(a)(1)(G) creates an intergovernmental communications process, based on existing law and practice, that provides the best available approach to this problem.

As great as the remaining challenges in nonpoint source pollution appear to be, it would be wasteful and destructive if Congress were to force the states and localities to start a completely new process. Subsections 112 (a)(2) and (3) recognize that a great deal of information is available from prior work done under Section 208 and other parts of the Clean Water Act, and that many intergovernmental arrangements between states and local entities are already in place. Using these resources is the only sensible approach. They will, almost certainly, not be fully adequate, but supplementing what is already in place is clearly more sensible than starting over.

Subsection 112 (b) addresses the difficult question of how to respond to the state that chooses to do too little, or nothing. Again, this question has been addressed by creating a communications process rather than a legal confrontation. It may not be as direct and positive as some would prefer, but it is the only feasible approach. The federal government can not, by itself, develop and enforce a nonpoint source program that will work at the level of the individual land user. That fact, simple as it sounds, must underlie any effort at federal over-ride. If the federal agencies can not do the task, and the states refuse to attempt it, communication and negotiation are the only strategies available. The federal agency must convince the state that what is being asked is feasible, that it is in the state's interests, and that help and support will be available if the state makes an honest attempt. S. 53, as now written, would allow that to happen.

The proposal to offer two-thirds of any federal incentive grants under a formula and the remaining one-third as incentive grants to those states and Indian tribes willing to address difficult problems is an excellent compromise among the many options for handling such funds. It is clear that a program limited to either formula funding or competitive grants would have problems. If the program dollars went on a competitive basis, a few alert and aggressive states would claim them all. If, on the other hand, they were all on a formula basis, there would be no incentive to do interstate work, tackle innovative approaches, or go beyond the minimum federal expectations. In addition, the need to deal with Indian tribes would still remain. The funding proposal in S. 53 will balance these needs, and should allow the Administrator of EPA ample latitude to get the most benefit from the federal dollars involved.

There was considerable argument over the use of federal funds under this Act for cost-sharing with individuals. Subsection 112(d)(4) addresses this question by limiting financial assistance to individuals to those cases where the assistance is part of a demonstration project. As this Committee is aware, most people who have worked with the agricultural aspect of this issue are convinced that some form of public cost-sharing is absolutely essential in light of the economic and technical problems encountered in applying pollution-preventing measures to farm land.

That cost-sharing does not have to come from this federal source, but it must come from somewhere. It will not come from USDA's soil conservation programs, that is clear. Those programs, which are hard-pressed to find any financial support in today's budget climate, are going to address other priorities first. Water quality is a concern at USDA, but not a top priority, and there is no money for anything but top priorities.

Some cost-sharing may come from state funds. Recent information from the National Association of Conservation Districts indicates that 24 states now have state-funded cost-share programs for erosion control or water quality improvement, and that number has been growing steadily in recent years. Incentives from this federal program could draw more state money to this purpose, it would appear. If the Congress retains the limitation on assistance to individuals as now proposed in S. 53, we would urge that the Committee clearly establish that state funds for cost-sharing would be fully recognized as part of the non-federal input recognized for purposes of matching the federal grants to the states.

In conclusion, Mr. Chairman, it is a pleasure to come before you today to support Section 112 of S. 53. It represents a well-reasoned, reasonable and feasible approach to nonpoint source pollution. It is a beginning. It will not solve all the problems. But it lets state and local governments, private organizations, and private citizens start with what we know, and where we are today, and continue work that has already begun. No doubt, Congress will need to continually watch over the progress that is made and fine-tune these programs. As one of the many private conservation organizations that are keenly interested in keeping America's waters clean, the American Forestry Association will be pleased to continue developing information and assisting the Congress in this effort wherever we are able.

STATEMENT OF
CHARLES H. DEAN, JR., CHAIRMAN
RICHARD M. FREEMAN, DIRECTOR
JOHN B. WATERS, DIRECTOR
TENNESSEE VALLEY AUTHORITY
SUBMITTED TO THE SUBCOMMITTEE
ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

April 19, 1985

As a Federal agency with a regional watershed perspective on natural resource management, the Tennessee Valley Authority (TVA) has made a commitment to protect and enhance water quality in the Tennessee Valley. In the legislation that created it more than 50 years ago, Congress charged TVA--among its other responsibilities--with promoting the conservation, unified development, and wise use of natural resources in the Tennessee Valley. Although TVA has limited regulatory authority, the agency is a major force in the region for environmental protection and restoration. Citizens of the Tennessee Valley expect TVA to develop and publicize information about environmental issues, and we believe they have justified confidence in our data, our objectivity, and our technical judgment. This statement is based on TVA's experience in assessing and eliminating water pollution. As such it is not directed toward specific legislation. The Office of Management and Budget advises that this agency's views are not in accord with those of the Administration. On March 26, 1985, the EPA testified before this Committee regarding the Administration's proposal to amend the Clean Water Act (S. 793). The Agency strongly recommended enactment of S. 793 and detailed its views on a number of issues, some of which substantially vary from those taken by TVA in this statement (including approaches to non-point source pollution, re-mining and construction grants).

TVA sent a statement on the Clean Water Act to this subcommittee on August 17, 1982, and presented testimony before the full Committee on July 19, 1983, about the need for a national nonpoint source pollution control program. We would refer you to the record for these statements and TVA's efforts to address agricultural nonpoint source pollution. In this statement we want to update the subcommittee on TVA's experience with nonpoint pollution abatement and briefly address groundwater contamination, lake and reservoir water quality,and several other water quality issues of interest to the Committee.

Nonpoint Source Pollution - Agriculture

In our earlier statement, we reported that degraded water quality associated with nonpoint sources was one of the major water pollution concerns in our 7-State region. Of the 10 most critical water quality problems 7 were related to nonpoint pollution, that is, nonpoint source runoff from agriculture, urban areas, mining, and construction. We felt then and still believe it is not being adequately addressed, and the Clean Water Act goals of "fishable, swimmable" waters will not be met in many parts of the Valley unless an accelerated point, nonpoint pollution control program is implemented. We indicated that damage is not only occurring to natural resources but also to economic development efforts, water supplies, and the Nation's $1.53 billion investment in the TVA reservoir system.

Since identifying agricultural runoff as a major water quality concern, a landowner/State/Federal partnership has been developed by TVA, the U.S. Department of Agriculture, the Valley States, and individual landowners to control soil erosion problems at selected locations. One of the key elements of this program is the preparation of a conservation plan identifying best management practices (BMPs) for each farm and an agreement with the farmer to implement the recommended BMPs as a prerequisite for receiving cost-sharing incentives. In the first four years of this program, initiated in West Tennessee, soil losses on 144 demonstration farms have been reduced by 74 percent with the implementation of cultural and mechanical BMPs. This has resulted in a savings of more than 300,000 tons of topsoil each year. After five years the participating farmers have installed 70 miles of terraces, 56 acres of waterways, 365 sediment basins, 22,700 acres of drilled crops, and 16,500 acres of no-till. Crop yields have not been affected and production costs have gone down. Experience with these BMPs in west Tennessee has shown that labor costs can be reduced by about 50 percent, and about 350 gallons of diesel fuel are saved for each 100 acres cropped using conservation tillage. However, only a small part of the total problem has been addressed and water quality may not improve sufficiently to restore designated uses until BMP implementation becomes more widespread.

In 1984, this effort was expanded to all 201 counties in the Tennessee Valley region through a new program called "Land and Water 201." One of the objectives of this TVA effort is to serve as a national model on how to implement nonpoint pollution controls to achieve Clean Water Act goals. EPA and the States have joined the cooperative effort, and cost-sharing incentives as well as technical assistance are now being targeted to the "hot spots" contributing to nonpoint pollution.

This cooperative approach among Federal and State agencies, coupled with incentives to encourage implementation by local landowners, has proven to be cost effective, especially when targeted to high priority runoff areas.

Nonpoint Source Pollution - Urban Runoff

While agricultural related soil erosion degrades water quality and impairs its use, pollutants associated with urban runoff have the same effect. For example, the results of a cooperative EPA-TVA investigation conducted as part of the National Urban Runoff Program, showed that biochemical oxygen demand (BOD) and suspended solids from one small drainage basin equaling one-sixth of the total urban area exceeded the combined annual loads of the city's four municipal treatment plants. Urban runoff also contained pollutant loads for copper, zinc, chromium, nickel, and iron that exceeded the combined annual loads from the wastewater treatment plants. Clearly, any program to improve water quality should not ignore these nonpoint sources while addressing only the more obvious point source discharges. However, in addressing this issue, each community is faced with the question of how to finance their pollution abatement efforts in the most cost-effective manner.

An example of what many small and medium size communities in our area are experiencing is typified by the Boone Reservoir situation. In 1984 TVA's Boone Reservoir was posted by State regulatory authorities warning against whole body water contact recreation and the eating of fish because of sewage contamination. The source of the sewage was Bristol, Tennessee--population 23,986. Since posting the lake the city has been placed under an order from the State of Tennessee to eliminate combined sewer overflows and upgrade its municipal waste treatment plant. When this $30 million project is completed there should be some improvement in water quality in Boone Reservoir. However, the degree of improvement is difficult to predict since urban and other nonpoint sources also contribute similar types of pollutants to Boone Reservoir. To fully restore water quality in TVA's reservoir it is estimated that an additional $60-70 million will be needed for an expanded collection and advanced waste treatment system versus $20-30 million for BMPs to control nonpoint source runoff.

To gain the most water quality improvement from available funds during this time of constrained budgets, one concept worth national consideration is added flexibility in the State's administration of the construction grants or revolving loan program for innovative, cost effective pollution control measures. Stated another way, if nonpoint source controls can improve water quality in a more cost-effective way than an advanced waste treatment system, it makes sense to give the States the flexibility to use their construction grant monies to implement nonpoint source controls.

Nonpoint Source Pollution - Mining

Water quality concerns related to strip mining unfortunately did not end when Congress passed the Surface Mining Control and Reclamation Act (SMCRA) in 1977 that created a Federal program to regulate surface mining and a trust fund to reclaim abandoned mine lands. In a recent report on mine lands, TVA's staff found that of the 117,000 acres of coal lands and 53,000 acres of noncoal mineral lands surface mined in the Tennessee Valley prior to adequate reclamation laws, some 54,700 remain either inadequately or totally unreclaimed.

The most serious environmental problem associated with "orphaned" or "abandoned" mine lands is sediment runoff. EPA has estimated that annual sediment losses from these lands is approximately 2,400 tons per square mile per year or 100 times higher than the loss of sediment from an unmined forest watershed. The sediment from orphaned mine lands alters the chemical balance of water, harms municipal water supplies, converts clear streams into mudflats, reduces the flood storage and power generating capacity of multipurpose water resource projects, and smothers fish and other aquatic life.

In the Valley States of Tennessee, Virginia, North Carolina, and Kentucky; pollutants from poorly reclaimed or unreclaimed coal and noncoal mineral lands are adversely affecting six tributaries of the Tennessee River. In addition, two locally owned reservoirs and five TVA tributary reservoirs are experiencing sediment buildup, water quality deterioration, and the loss of water supply and flood storage capacity. In one extreme case in east Tennessee TVA has retired a hydropower project with a loss of power worth over $1.1 million per year because of sediment buildup from abandoned mine lands. In another situation in North Alabama, runoff of acidic water and sediment is impairing the recreational use of Upper Bear Creek Reservoir and its use as a regional water supply.

To help alleviate these adverse impacts, TVA in cooperation with State agencies and local soil and water conservation districts has helped reclaim abandoned mine lands in 38 counties in Alabama, Kentucky, Tennessee, and Virginia, from 1976 to 1980. This minimum disturbance (basic) reclamation treated approximately 13,600 acres. This was accomplished, in part, by the construction of 15,000 sediment control check dams, planting over 10 million trees and 5 million wildlife shrubs, and providing almost 600 thousand man-hours of productive work.

With over 54,000 acres of abandoned mine land still in existence, TVA is concerned about any attempts to weaken the pollutant control provisions in the Clean Water Act whether they involve new mines or remining operations. Instead of seeking relaxed controls, we would encourage the coal industry to take the initiative in minimizing pollution, especially sediment runoff. One action that could be taken by the industry is the full reclamation of remined lands. In those situations where only a portion of the land is remined, it would be both cost effective and environmentally sound if the Office of Surface Mining had the flexibility to modify its priority system and make monies from the SMCRA trust fund available to reclaim the rest of the orphaned mine land. This would eliminate an environmental problem and help put workers in a currently depressed industry back to work. The need for maintenance dredging and flood relief projects, many of which are Federally funded, would also be reduced under this approach.

Groundwater Contamination

The Tennessee Valley Authority is concerned about groundwater because incidents of groundwater shortages and contamination are becoming more prevalent. During the last year TVA prepared a groundwater situation assessment of the 7-State Tennessee Valley region (Attachment 1). In our assessment we found that groundwater was being used totally or in part by nearly two-thirds of all residents for drinking water. Although regional groundwater quality was generally good, improper management of land use activities in groundwater recharge areas has resulted in groundwater contamination at many locations. We also found that:

> Over 60 Federal and State agencies are involved to some degree with groundwater in the Tennessee Valley region. The large number of agencies makes coordination or even communication difficult. Each agency carries on its responsibilities as it is mandated. Fragmentation of responsibilities results in inefficiencies and duplication of efforts. Some regulatory difficulties occur due to the interrelationship of groundwater and surface water because stream baseflow is sustained by groundwater discharge (e.g., solid waste management and water pollution control agencies within State government are frequently not in the same department yet they both claim responsibility for protecting the water resources from waste disposal practices) (page IV, Attachment 1).

Groundwater contamination is a concern to TVA for another reason, i.e., it is affecting the health of the Valley's citizens. In the last five years there have been over 2,400 reported cases of acute ground-water borne disease in the seven Valley states from bacterial sources--with 300 cases of hepatitis and one fatality reported in Kentucky during one year. Other nonbacterial health related concerns were also suspected but we were unable to find information on organics or heavy metal contamination because that information is not routinely gathered nor is related data monitored by any agency. This lack of information is especially important because we have found, in cooperative projects with EPA, that polluted urban runoff recharges ground water and reaches domestic wells.

Groundwater protection has been the focus of the First Tennessee Development District Groundwater Demonstration which TVA initiated in 1984 as a direct result of the findings from TVA's groundwater situation assessment. The demonstration represents an opportunity to develop procedures and policies for communities in this region and elsewhere to protect the groundwater resources. The demonstration consists of several specific tasks: a raw groundwater quality survey of public water supplies, mapping of the groundwater recharge areas, land use surveys of the recharge areas, technical assistance related to the development of any necessary model legislation, the creation of groundwater management areas, public information and education, and preparation of materials useful for other communities to protect their groundwater resources.

In undertaking this demonstration, initial investigations revealed an incident that illustrates in a clear fashion the pressing need for systematic groundwater regulation. The organic contaminant trichloroethylene (TCE) was found during the water quality survey. Further investigations pinpointed the cause to a backyard cleaning drum operation. These activities were directly effecting drinking water. Fortunately the situation is now under control through the cooperative efforts of EPA, the State, the First Tennessee Development District, and TVA. The corrective actions pursued include determining the extent of the organic chemical contamination and furnishing bottled water to local residents, as well as attempting to find the source of the pollution. In the meantime, periodic monitoring of the public water supply by EPA has continued to ensure that the contaminant stays below the proposed recommended water quality criteria for TCE.

With the publication of EPA's "Ground-Water Protection Strategy" an essential first step has been taken in addressing groundwater issues. Based on our experience in the Tennessee Valley in which we noted the close linkage between surface and groundwater quality, a reasonable next step would be the unified management of both surface and subsurface water quality under the authority of the Clean Water Act. This approach would help resolve the problem of fragmentation discussed above and would make use of a proven mechanism for dealing with groundwater.

Lake and Reservoir Water Quality

We would also like to call the Committee's attention to water quality concerns in our Nation's lakes and reservoirs. In a survey of lake pollution conducted for EPA in 1983, the State of Tennessee reported that of its 112 lakes and reservoirs, water quality in 37 did not meet State water quality standards and fully one-half were experiencing excessive nutrient concentrations. Some of TVA's reservoirs are among those lakes being degraded by continued, unaddressed point and nonpoint source discharges. Unfortunately, this is not just a regional concern but a national one. The same survey found over four thousand lakes and reservoirs in the U.S. to have degraded water quality that was impairing designated uses and violating State water quality standards.

In addition to the unaddressed pollutants from urban runoff, acid mine drainage, and agriculture, there are excessive loadings of nutrients and oxygen demanding wastes. If this issue remains unaddressed, TVA is concerned that many of TVA's reservoirs will experience accelerated eutrophication and use impairments.

Another issue of concern to TVA with regard to its reservoir system and the benefits it provides is toxic contaminants. Within the last few years we have experienced problems with mercury contamination in Cherokee, Watts Bar, Kentucky, and Pickwick Reservoirs; PCB contamination in Fort Loudoun and Wilson Reservoirs; and heavy metals contamination in two reservoirs on the Ocoee River. In fact, Parksville Reservoir on the Ocoee River is virtually a biological desert because of the failure to control point and nonpoint source discharges which contain heavy metals.

Some of these examples represent residual, in-place contamination and others represent continued discharges of toxic substances. Many escaped early detection of ambient physico-chemical and traditional NPDES monitoring requirements. This situation could be remedied through the adoption of numerical criteria and perhaps site specific criteria to protect reservoirs and incoming streams from the effect of toxic substances.

Because of their inherent sensitivity lakes and reservoirs need special attention and deserve effective rehabilitation and protection programs for nonpoint pollution control, toxic substances, and excessive nutrients. TVA is developing water quality management plans for TVA reservoirs to improve and protect these resources. By the end of this year we will have completed plans for four TVA reservoirs with another three in various stages of development. The reservoir water quality management plan is an integration and combination of sections 208, 303, and 314 type water quality planning and management activities that focus on a specific reservoir unit. The plans identify existing water quality problems and recommend corrective actions. They also identify those management strategies which must be implemented in the future to ensure protection of the beneficial water uses.

TVA is the only Federal water resource agency, to our knowledge, developing and implementing this type of reservoir water quality management plans in cooperation with the States and other appropriate agencies. We have found that reservoir systems require constant monitoring, analysis, and planning followed by vigorous implementation of management plans if the benefits they provide are to be maintained. We also believe that if the Tennessee Valley and the Nation are to achieve Clean Water Act goals, flexibility for States in making cost-effective tradeoffs in point versus nonpoint abatement are needed, once secondary waste treatment requirements are met.

Conclusion

As noted in our 1983 statement, degraded water quality associated with nonpoint source runoff from agriculture, urban areas, mining, and construction represents one of the major water pollution problems facing our 7-State region. We felt then and still believe it is not being adequately addressed, and the Clean Water Act goals of "fishable, swimmable" waters will not be met in many parts of the Valley unless an accelerated point, nonpoint pollution control program is implemented. We continue to feel that a national program of landowner-State-Federal partnerships is essential to organizing and facilitating cooperative programs on the scale needed to achieve sufficient nonpoint source pollution abatement to reach water quality goals. Based on our experience in the Valley TVA can now support an aggressive voluntary program. The Environmental Protection Agency (EPA) maintains it presently has efficient authority and responsibility to oversee the preparation and implementation of measures to improve water quality nationally. TVA would support an affirmative decision by EPA to use their authority and to make available the resources necessary to support such a decision. TVA's experience also indicates that a system of incentives and the possible use of disincentives are needed in any voluntary program to implement BMPs. Cost sharing and technical assistance could provide incentives; disincentives could include Federal, State, and local consistency in application with agricultural and other incentives programs and restrictions on Federal subsidies and grants for those individuals and States not implementing BMPs.

In the specific area of urban nonpoint source pollution, national attention or reemphasis is needed as part of a national nonpoint source control program to implement cost-effective BMP's along with the integration of point and nonpoint source pollution abatement strategies. Our experience with water quality problems in TVA's reservoirs indicate that no major improvement will occur until point and nonpoint sources are considered and implemented as part of the overall water quality improvement strategy. In order to do this in a more cost effective way, innovative approaches will be necessary, such as allowing States to use more of their allocation of the existing $2.4 billion construction grants or revolving loan program to fund specific nonpoint pollution control projects. In many instances these solutions are more cost effective than building traditional advanced wastewater treatment plants. If the Tennessee Valley and the Nation are to achieve Clean Water Act goals, the States should be provided with the flexibility to make tradeoffs in point versus nonpoint abatement, once secondary treatment requirements are met, and in targeting clean water funding to where it is most cost effective.

We would also like to emphasize another point as it relates to groundwater contamination. In our survey on groundwater, we found over 60 Federal and State agencies involved with groundwater in the 7-State region. The lack of consistency and the gaps in local, State, and Federal laws indicate the need for a more comprehensive national framework to integrate these various programs. With the recognized linkage between surface and groundwater quality, it seems appropriate to consider unified management and protection of both surface and subsurface water quality under the authority of the Clean Water Act.

STATEMENT FOR THE HEARING RECORD
OF THE
SENATE ENVIRONMENTAL AND PUBLIC WORKS COMMITTEE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
REGARDING
REAUTHORIZATION OF THE CLEAN WATER ACT

MARCH 27, 1985

By
County Sanitation Districts of Orange County,
California

Post Office Box 8127
Fountain Valley, CA 92728-8127
(714) 540-2910

ORANGE COUNTY SANITATION DISTRICTS (CALIFORNIA)
DEEP OCEAN SLUDGE DISPOSAL RESEARCH PROJECT

Research Project Proposal

The Orange County Sanitation Disticts (California) are requesting consideration of legislation to authorize the EPA Administrator to issue a five year research permit to monitor the effects of discharging a limited volume of preconditioned, non-toxic municipal sludge under controlled conditions by pipeline into the deep ocean (1000 feet depth) at a distance of 8 miles offshore in open ocean.

The motivation for discharging sludge to an ocean depth 3 to 4 times deeper than any previous project is to place this material in a location which is farther removed from biologically productive water and more isolated from human interaction. (See Appendix, Goals of the Research Project).

Concept and Study Status

This disposal concept first appeared in the 1980 LA/OMA Project Sludge Management Report, a $3.5 million dollar study for Metropolitan Los Angeles and Orange Counties, as an ocean disposal alternative with the recommendation for in-depth scientific evaluation and further study.

For more than three years, a scientific evaluation study for this concept has been underway at the California Institute of Technology (Cal-Tech) Pasadena funded by Orange County and the National Oceanographic and Atmospheric Administration (NOAA). The research has generated considerable interest in the Congress. In fact, the Conference Report on the 1981 Clean Water Act Amendments stated "...the Research Project conducted by NOAA on sludge from the Orange County Sanitation Districts may continue".

Project Financing

Orange County will put up the $15 million dollar project construction money from revenues from its operations. The $1.0 to $1.5 million annual monitoring costs during the five year project life will also come from Orange County, therefore, no federal funds would be required.

Project Administration

The project would be conducted in a manner acceptable to the EPA Administrator. The project would be administered independently of the Sanitation Districts and will involve NOAA, EPA, the State and Regional Regulatory Agencies, as well as Cal-Tech and the Southern California Coastal Water Research Project (SCCWRP). Thus, the ultimate success or failure of this deep ocean experiment will be judged by the marine scientific community that will evalute the multifaceted experiments conducted by other scientists during the life of this project.

Project Administration (cont'd)

Many of the proposed experiments have never been conducted before, particularly in actual life situations. If the marine monitoring program for this project reveals unacceptable deleterious effects, the discharge to the deep ocean will be terminated immediately.

Research Project Discharge Limitations

Quality - The sludge quality characteristics will be controlled by several feasible wastewater treatment combinations. Characteristics of both the discharged sludge and the initial mixing in the ocean are within the control of the design engineer. Available alternatives, both in the treatment plant and the submarine discharge structure will be examined in terms of their effects on sludge quality, initial mixing, and sludge behavior subsequent to discharge.

In addition to in-plant treatment measures designed to produce a sludge of acceptable quality for marine disposal, the Districts will continue their successful industrial source control enforcement program. (See Appendix, Orange County Sanitation Districts (California) Source Control Program).

Volume - The Deep Ocean Research Permit issued by the EPA Administrator will limit the sludge volume discharge to not more than one half of the Districts' volume. For comparison purposes, the daily experimental discharge in dry volume terms will not exceed the space within an 8' x 8' x 24' cargo container. In other terms, the project's limited solids discharge will be less than the particulate limitations established by EPA for POTW secondary treatment (30-30) discharges of 390 MGD or more to lakes and streams in the United States.

Final Report

The results of all research data and final reports would be made available to the Regulatory Agencies and the Congress.

This project's appeal is that it will provide reliable data to help guide future decisions in dealing with one of the most complex issues in the entire clean water area, namely, the assimilative characteristics of the deep ocean.

Other Sludge Research Projects

During the course of the Deep Ocean Research experiment, Orange County will continue research on at least two land based alternatives suggested in the 1980 LA/OMA Sludge Management Report with special emphasis on remote disposal alternatives and programs for reuse/recycled utilization of sludge. In other words, Orange County, like many other POTW's, is seeking sound scientific data on which to base its selection of the best environmental alternative for sludge management.

Conclusion

It makes a great deal of sense for the Congress to authorize the EPA Administrator to issue a research permit for this well defined project as no federal funding is required and yet the Congress and EPA will be the beneficiary of the results of the monitoring program and the analysis of the research data. Safe, intelligent use of the ocean for waste disposal will ultimately depend upon mathematical characterization of important oceanographic processes in terms of their effect on waste dispersal and assimilation. This research plan is directed toward that goal, we therefore respectfully request adoption of the following proposed amendment to S.652:

> "OCEAN DISCHARGE RESEARCH PROJECT
>
> Notwithstanding any other provision of law, the Administrator is authorized to issue a research permit to the Orange County (California) Sanitation Districts for the discharge of preconditioned municipal sewage sludge into the ocean for the purpose of enabling research to be conducted in assessing and analyzing the effects of disposing of sewage sludge by pipeline into ocean waters, provided that (1) such permit for the discharge of sludge shall be for a period not to exceed five years, (2) that the monitoring of discharges and their impacts shall be in conformance with requirements established by the Administrator, after consultation with appropriate Federal and state agencies, (3) the Administrator is satisfied that such local governmental agency is actively pursuing long-term land based options for the handling of its sludge with special emphasis on remote disposal alternatives set forth in the 1980 LA/OMA Sludge Management Project and on reuse/recycled utilization of sludge, (4) the volume of such local agency's sludge disposed of by such experimental pipeline shall be no more than one and one-half times that being disposed of by such remote disposal and reuse/recycled alternatives referred to above, and in no event shall the agency dispose of more than 50% of its sludge by the pipeline, and (5) results of the monitoring programs and the analyses of such data shall be reported to the Congress within 180 days after the expiration of such permit."

Respectfully submitted,

J. Wayne Sylvester
General Manager

APPENDIX

GOALS OF THE RESEARCH PROJECT

The research project should be designed to clarify aspects of the behavior and effects of the deep sludge discharge and to provide information to make future decisions regarding sludge discharge to the ocean. The specific goals are:

1. To characterize the physical, chemical, and biological properties of the sludge.
2. To recommend:
    - depth and location of the end of the sludge outfall;
    - in-plant processing of sludge before discharge; and
    - possible modifications in industrial waste pretreatment (or source control) programs for trace contaminants.
3. To make pre-discharge predictions of sludge induced environmental impacts. These would include changes in water column oxygen concentrations and benthic sedimentation rates.
4. To observe changes in water column and benthic communities and measure the distribution of important chemicals in the water, in the sediment, and in organisms.
5. To find what human health risks (if any) are associated with deepwater sludge discharge, either directly through human contact with seawater or indirectly through consumption of seafood.
6. To determine the mechanisms by which ecological and chemical changes occur.
7. To assess the predictability of the effect of deep sludge discharge by comparison of model predictions with monitoring data. Effects to be determined from the monitoring program include sedimentation patterns, alteration of biota, and changes in water and sediment chemistry. It is pertinent to ask how well the fate of discharged materials can be accounted for in mass balance analyses.
8. To summarize and recommend methodology for designing systems for sludge discharge into the ocean and predicting the effects.
9. To summarize the effects of the Orange County sludge discharge, and evaluate their significance with respect to marine resources.

LIST OF RESEARCH TASKS

Group I SURVEY FOR DISCHARGE-RELATED EFFECTS

- Measurement of Water Quality Characteristics
- Water Column Biological Monitoring
- Inventory of Local Sport and Commercial Fishing Activities
- Trawl Monitoring Program
- Benthic Surveys
- Age Dating and Chemical Analyses of Sediment Cores by Layers
- Measurement of Sedimentation Rate via Sediment Trap Deployment
- Bioaccumulation of Trace Contaminants
- Designation of Control Sites for Water Column and Sediment Monitoring

Group II SITE CHARACTERISTICS

- Measurement of Local Currents
- Hydrographic Surveys for Determination of Geostrophic Currents
- Site Bathymetry

Group III SLUDGE CHARACTERIZATION

- Measurement and Projection of Sludge Quality Parameters
- Evaluation of In-Plant Unit Operations Affecting Sludge Characteristics
- Measurement of Sludge Particle Size Distribution, Settling Characteristics, and Coagulation Effects
- Mobilization of Trace Contaminants within the Water Column

Group IV MODELING

- Initial Dilution and Height of Plume Rise
- Estimation of Dissolved Oxygen Concentrations
- Estimation of Particulate and Trace Contaminant Fluxes to Local Sediments
- Sediment Concentrations of Dissolved Oxygen and Sludge-Related Contaminants
- Biological Models

Group V PRELIMINARY DESIGN

- Evaluation of In-Plant Design Alternatives
- Selection of Discharge Site and Submarine Pipeline Technology

Group VI BIOLOGICAL IMPACTS -- LABORATORY STUDIES

Effect of Sludge Particles and Organics on Zooplankton Feeding
Dependence of Zooplankton Respiration on Ambient O_2 concentration
Microbial Decomposition of Water Column Organics
Sea Urchin Toxicology -- Lab Study

Group VII BIOLOGICAL IMPACTS --*IN SITU* STUDIES

Benthic Oxygen Consumption
Rates of Particle Ingestion by Macrobethos
Effect of Sludge Particulates on the Feeding Habits of Marine Fauna -- Baited Camera Experiments
Field Observation of Zooplankton Feeding in the Presence of Sludge Constituents
Other Biological Experiments

Group VIII SPECIAL STUDIES

Identification of Sludge Tracers
Remote Tracking of Wastefield
Extrapolation from Hyperion Sludge Disposal Experience
Assessment of Potential Public Health Impacts

Group IX INTEGRATION, ANALYSIS AND INTERPRETATION

Analysis and Interpretation of Survey Data
Comparison of Model Predictions with Observations
Effects of Organic Enrichment on the Dynamics of Midwater Plankton Communities
Revision of the Research Plan
Annual Summaries of Project Results, Conclusions and Recommendations

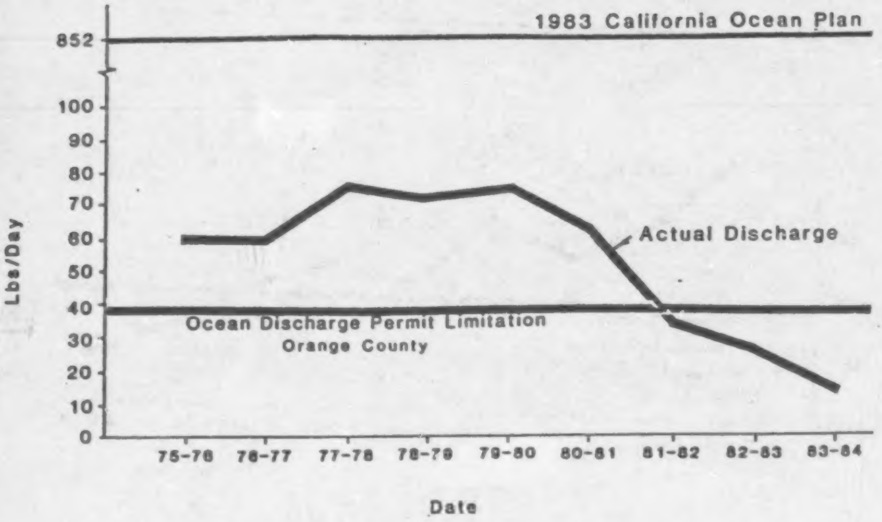
COUNTY SANITATION DISTRICTS
OF
ORANGE COUNTY, CALIFORNIA

INDUSTRIAL DISCHARGE LIMITS, mg/l
(Source Control Program)

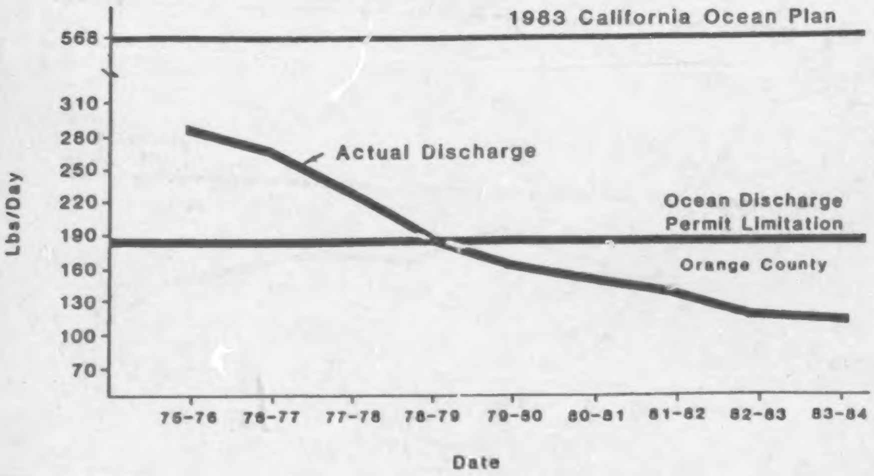
CONSTITUENT	EFFECTIVE July 1, 1976	EFFECTIVE July 1, 1978	EFFECTIVE July 1, 1983	EFFECTIVE April 27, 1984
Arsenic	2.0	2.0	2.0	2.0
Cadmium	5.0	3.0	1.0	1.0
Chromium (total)	6.0	2.0	2.0	2.0
Copper	10.0	4.0	3.0	3.0
Lead	2.0	2.0	2.0	0.6*
Mercury	0.03	0.03	0.03	0.03
Nickel	10.0	10.0	10.0	4.1*
Silver	5.0	5.0	5.0	1.2*
Zinc	15.0	10.0	10.0	4.2*
Cyanide (total)	10.0	5.0	5.0	1.9*
Cyanide (free)[1]	1.0	1.0	1.0	1.0
PCB's & Pesticides			0.02	0.02
Total Toxic Organics (as defined by EPA)			0.58	0.58
Total Sulfide			5.0	5.0
Dissolved Sulfide			0.5	0.5
Oil and grease of mineral, petroleum origin			100.0	100.0

* Environmental Protection Agency categorical standards for metal finishers. One day maximum limits.

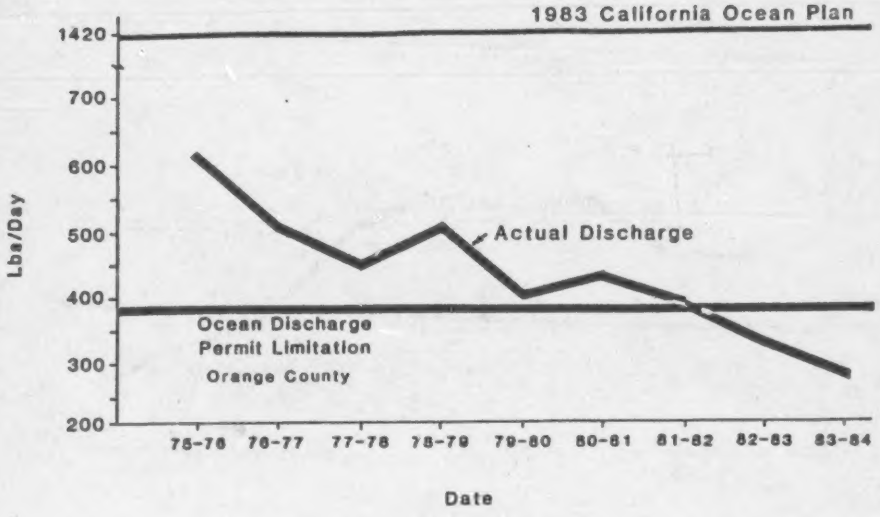
1. The term "free cyanide" shall mean those cyanides amendable to chlorination as described in the Annual Book of ASTM Standards, 1972, Standard D 2036-72 Method B., page 553.



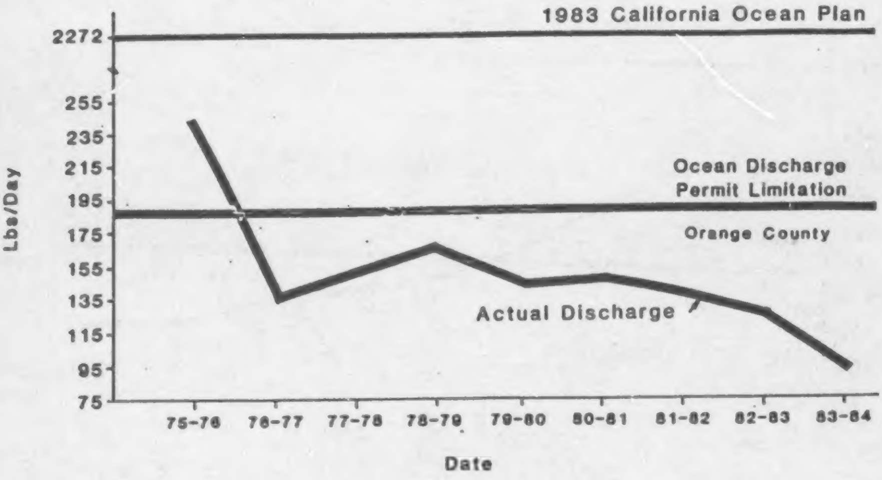
Effluent Cadmium



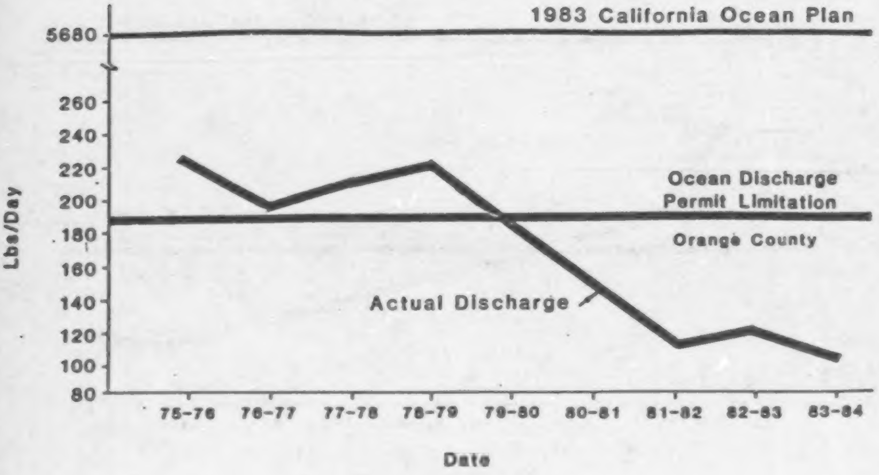
Effluent Chromium



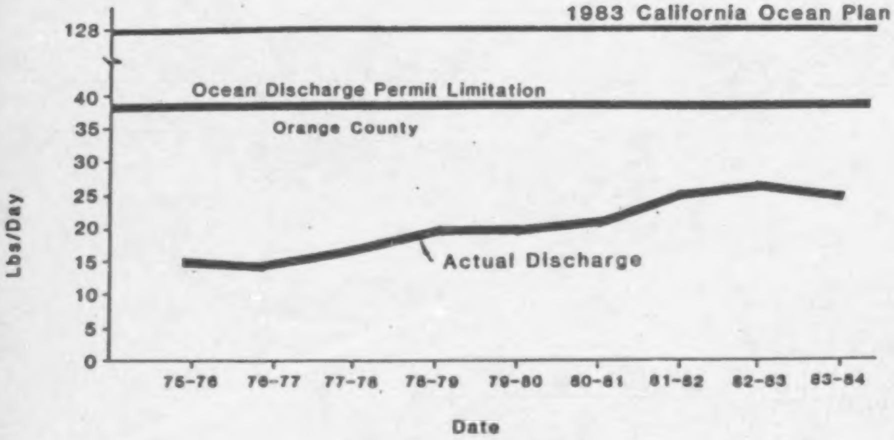
Effluent Copper



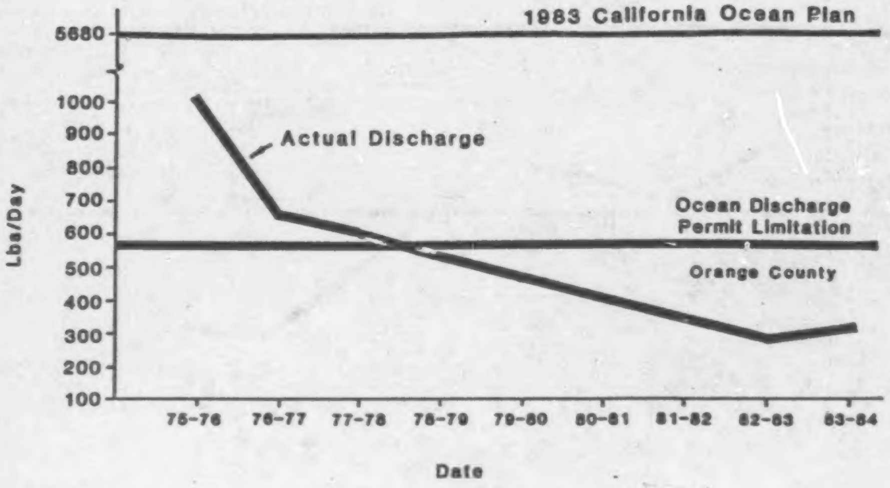
Effluent Lead



Effluent Nickel



Effluent Silver



Effluent Zinc

STATEMENT OF
THE HONORABLE GIL SALDANA
MAYOR, CITY OF AVALON, CALIFORNIA
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT & PUBLIC WORKS
U.S.SENATE
MARCH 27, 1985

Mr. Chairman, Members of the Committee, we appreciate the opportunity to present testimony to you regarding the Clean Water Act, the amendments to that Act which have been recently introduced, and how this program relates to the City of Avalon.

Avalon, a community of approximately 2,000 permanent residents, is located on Santa Catalina Island, twenty-three miles from the coast of Southern California.

We are a unique community for many reasons, but we are especially unique in our dependence on water -- clean water, as our entire economy is based on tourism which is dependent upon clean water in a marine environment.

Today, that economy -- our jobs andlivelihood -- is threatened by pollution. During the summer -- the peak tourist season -- we host up to 50,000 visitors who come to Catalina to enjoy our beautiful weather, beaches, coastal areas, and relaxed atmosphere. If there is not a strong, general perception of clean water, the tourists would not visit our community, the local economy would wither and die, and the nation would lose a valuable and irreplacable natural resource.

And, Santa Catalina Island is a natural resource with the vast majority of the land area remaining virtually unchanged since the days when Indians were the only inhabitants. By way of background, the Island was purchased by the Wrigley family in 1919. The Santa Catalina Island Conservancy, a non-profit foundation, acquired title to 86% of the Island in 1974. In 1975, the Conservancy entered into a 50-year open-space agreement with Los Angeles County. The purpose of this agreement is to preserve and conserve the resources of the Island.

Thus, Santa Catalina Island, is in effect, held in trust for the enjoyment of this and future generations.

For these reasons -- our local economy which depends on a clean environment and our commitment to preserving the Island for future generations -- we are vitally effected by the actions which you may take to amend the Clean Water Act.

Earlier, I stated that the perception of clean water is essential for Avalon. Let me detail for you the frustration of the problem.

Our sewage treatment facility, which consists of an extended air secondary treatment process and was designed for an average daily flow of 500,000 gallons and a peak flow of 850,000 gallons, is actually receiving 900,000 gallons per day during the summer, with peak flows as high as 1.8 million gallons. As a result, daily average flows routinely exceed 150% of the facility's design daily average flows, and we violate waste discharge requirements on a daily basis. During July 1984, on an average day, we had a peak flow of 1.65 million gallons, fur a facility designed to accommodate .85 mgd (peak).

The problem with sewage has been an issue for many years. In fact, in the very populated Los Angeles region, Avalon was the second waste discharge case taken up by the Regional Water Quality Control Board.

Official interest is maintained until today. Avalon is the only discharger in the L.A.-Ventura area currently required to file a municipal compliance plan because, according to the Regional Water Quality Control Board, the plant is not in compliance with requirements of the Clean Water Act.

The California Division of Water Quality prepared a report in 1984. The report states that "it is most likely that adequate disinfection is rarely accomplished during the high flow summer months. This period is also when the greatest number of people are utilizing waters near the outfall for water contact recreation."

In order to increase the capacity of the facility and thus avoid sewage flowing into the ocean, the City of Avalon has allocated all growth in property tax base for the project. This was not an easy task. The effort initially failed before the electorate; however, the Council, with broad -base citizen support, reintroduced the matter to the public again within a period of six months, emphasizing the seemingly insurmountable problems presented by the sewer plant. This second effort was resoundly successful. In addition, the City has spent significant sums of its operation and maintenance monies to perform major improvements in the system. This effort has hard-pressed the community and caused the Council to make immense increases in sewer rates. Since 1980, there has been an astounding 450% increase in the City's sewer rates.

However, these local efforts to solve our problems with the facility are not sufficient, as the estimated costs of improvements are approximately $3 million. In their August 1984 report, the State found that "the facility is overdue for major expansion... The type of expansion needed is probably beyond the financial capability of the City...The City also has a relatively high sewage system user fee at the present time."

Fortunately, the State of California recognizes the serious nature of our problem and has placed Avalon on the statewide priority list as a Class C (discharge violations) priority project. This recommendation is based on the facility's inability to comply with the effluent discharge volume and flow rate limitation of our waste discharge requirement.

Mr. Chairman, we appreciate the work and the commitment to clean water that has been made by you and your Committee. We appreciate the fact that budgetary deficits are causing all of us to lower our sights and to reevaluate current methods of operation. However, if the City of Avalon is going to meet the goals of the Clean Water Act, if we are going to up-grade and increase the capacity of our sewage treatment facility, we must have Federal assistance in this effort. We are commited to these goals; preserving our community, and preserving the Island of Santa Catalina for future generations are objectives that we share. Through our very limited tax base and through our already stretched fee structure on users of the system, we are prepared to fund a portion of these costs. Yet, through our own financial resources, we fall well short of the costs of up-grading our facility.

Mr. Chairman, we commend you for conducting these hearings and we commend you for introducing your legislation which will move toward these goals. We respectfully urge you and your colleagues to move quickly on this proposal to continue funding the Clean Water Act. As just a small part of the mosaic known as the United States, we are depending upon you to assist us in our shared goals and commitments to restore our nation's waters so that this generation, so that future generations will be able to enjoy our natural resources, our beaches, our oceans, our fish and wildlife, consistent with the intent of the original Clean Water Act.

Statement by Mr. Joe Aceves, Director, Department of Wastewater Management on behalf of the City of San Antonio on Amendments to the Clean Water Act, before the Subcommittee on Environmental Pollution, Committee on Environment and Public Works, United States, Washington, D.C.

Mr. Chairman and Members of the Committee:

My name is Joe Aceves, Director of the Department of Wastewater Management for the City of San Antonio, Texas. San Antonio appreciates the opportunity to present its views on the importance of continuing the Wastewater Construction Grants Program to our city.

San Antonio and other American cities have supported the national framework for cleaning up the country's rivers, lakes and streams for more than 12 years. America is witnessing improved water quality as municipalities complete construction of wastewater treatment facilities to meet the enforceable provisions of the Clean Water Act.

We strongly recommend continuation of the Construction Grants Program's direct assistance to cities, counties and other local entities with Publicly Owned Treatment Works, through Fiscal Year 1990, at an authorization which takes account of the need for completing construction by the 1988 deadline.

Reauthorization of this program in essentially the existing form is very important to San Antonio and other local governments owning sewage treatment facilities. No better evidence of the importance of this program exists, than the Environmental Protection Agency's 1984 National Needs Survey. The February 10, 1985, draft of the survey report states that:

"Despite increases in population, significant water quality gains have been achieved by the municipal, state and federal investment in wastewater treatment facilities since the enactment of the Clean Water Act of 1972."

The survey report goes on to conclude that: "The rate of improvements, however, will depend on the rate at which the needs are met."

Since 1972, the Construction Grants Program, driven by the federal mandate, has been a critical source of financing for local governments.

Even with such assistance, local governments continue to bear the overwhelming cost of system improvements recognizing the grant eligible costs are only part of the investment and are eligible for 55% or 75% grant assistance.

The 1984 Needs Survey for Texas includes $372,165,000 in total grant eligible needs for San Antonio out of a total cost of $431,644,812, to build its Wastewater Facilities Improvement Program. San Antonio remains eligible for 75% matching assistance under the Construction Grants Program. It has received a total of $50 million in assistance from EPA under the FY'84 and FY'85 allotments.

We must initiate construction on the remaining portions of the program in FY'86, FY'87 and FY'88 under a compliance schedule with the State of Texas and an Administrative Order from EPA.

San Antonio will be in compliance by July 1, 1988, but will have received no more than an estimated 12% to 15% of eligible costs in federal grant assistance unless the program is extended.

This prospect is disappointing for San Antonio since it undertook an extensive planning process mandated by the federal government with the expectation that a major part of eligible costs would be provided by direct grant assistance. This expectation was clearly embodied in the framework of the 1972 Act which first authorized the Construction Grants Program to assist compliance with federally mandated treatment requirements and state water quality standards.

Our wastewater discharge permit requires the installation of advanced secondary treatment in response to both federal law and state stream standards. This requirement to go beyond secondary treatment, will cost an additional $61 to $90 million and will be of benefit to downstream users, none of whom pay sewer service fees.

We expect to raise rates by a total of 137% over what they were in 1983. With no more federal assistance, our rates will total $16.50 per month for each average, residential user. While this may not seem excessive to some communities, it is indeed high for many of our citizens who have the least ability to pay and are experiencing an increase in other utility costs, schools, and the cost of city, county and state government. Upgrading sewage treatment to meet a federal mandate will be costly to these citizens who make up a major part our community.

Five Year Program of Direct Grants

We strongly urge the continuation of direct assistance for an additional 5 years. While direct grants cannot go on indefinitely, a minimum of 5 years would be consistent with the commitment made in 1972 and renewed in 1981 for 10 years.

During the 5-year period, states and local governments and the EPA could prepare for other methods of financing, including the state revolving loan program contained in S. 652, the proposed Construction Grants Transition Act of 1985.

Making the financing of sewage treatment plant construction self-sustaining is a worthy goal for future projects necessary after compliance is achieved.

Those communities which have not significantly benefited from direct, federal grant assistance, however, should have an opportunity for the initial round of construction assistance needed to comply. Later improvements and reconstruction should be on self-sustaining basis.

A continued, 5-year program of direct grant assistance would:

- Maintain stability for a total of 10 years for a program which has been marked by many changes since 1972, resulting in planning, administrative and compliance dislocations;
- Provide sufficient opportunity for local governments, states and the Environmental Protection Agency to adequately plan for a transition;
- Recognize that the federal government will maintain the framework - some would call it a covenant - established in 1972, to provide a major portion of the assistance to comply with the enforceable provisions of the Clean Water Act;
- Recognize the expectations of local governments created by the 1972 Act, and support those which are making a good faith effort to meet the 1988 deadline;

- Continue to provide financing stability given what could become a more volatile bond market;
- Achieve equity by providing the opportunity for major systems ready to go to construction to benefit from direct grant assistance, as have those systems receiving assistance in the past; and
- Achieve continued further progress towards attainment of national water quality goals.

S. 652 would provide the opportunity to terminate direct grant assistance immediately by authorizing EPA to approve state requests, on notice, to use Title II assistance for capitalizing state revolving loan funds beginning in FY'86. This is indeed a disquieting prospect, especially for those communities which have just initiated construction or have projects ready for bid, the financial planning for which includes the prospect for direct grants. There would be no effective transition in this situation.

Local governments should be assured of continued direct support, especially those communities which have completed planning or initiated construction in order to comply with the 1988 deadline with the expectation that grants would be available.

The level at which the Wastewater Construction Grants Program should be authorized is subject to many considerations. No less than the current level of $2.4 billion should be provided in view of the forthcoming deadline and the emphasis EPA has placed on compliance in its National Municipal Policy.

Since few remaining opportunities exist to finance construction ahead of the compliance deadline, the case exists for funding at the highest possible levels during the next 3 fiscal years. This is particularly important for those communities which have initiated construction according to schedules and financial planning to achieve compliance by July 1988.

It is also supported by the importance for achieving national public health and water quality objectives and the outstanding federal share of $35.6 billion reflected in EPA's Needs Survey.

Refinance

State Water Pollution Control Revolving Funds under Sec. 603(d)(1) of S. 652 would be authorized to (among other things) refinance or buy debt obligations incurred by local governments after March 7, 1985. This feature would be helpful to many local governments which have encountered high interest rates and would presumably extend to all construction costs.

Making March 7, 1985, the effective date would, however, make $46 million in San Antonio bond financing (with approximately $82 million in interest) ineligible for refinancing under Sec. 603(d)(1). We recommend extending the effective date to the date of the enactment of the 1981 Amendments when the scope of federal role markedly changed.

The concept of providing retroactive assistance to local governments using their own resources in excess of the expected local share under the 1972 Act, is an important one, however. We urge the subcommittee to authorize grant reimbursements to local governments which will use debt financing in excess of the local share to meet the enforceable provisions of the Act by July 1, 1988. This approach further encourages compliance and would remove, what some have termed, a disincentive to initiate construction before federal grants become available.

This concludes San Antonio's statement on the future of the Construction Grants Program. Thank you for considering the City's recommendations.

STATEMENT FOR THE RECORD

BY THE

AMERICAN PAPER INSTITUTE
AND THE
NATIONAL FOREST PRODUCTS ASSOCIATION
1619 MASSACHUSETTS AVENUE, N. W.
WASHINGTON, D. C. 20036

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
OF THE
UNITED STATES SENATE

MARCH 28, 1985

I. INTRODUCTION

The American Paper Institute and the National Forest Products Association (API/NFPA) are national trade associations representing over 2,000 member companies who own and manage forest lands and manufacture pulp, paper and solid wood products. API/NFPA members have a direct interest in the effective implementation of the Clean Water Act.

II. FOREST INDUSTRY SUPPORT FOR THE CLEAN WATER ACT

API/NFPA's concern with the country's water resources predates the 1972 Federal Water Pollution Control Act. API/NFPA support the Act, as modified by the 1977 amendments. The 1977 record demonstrates that we were one of the industry leaders in proposing reasonable and constructive changes to the Act. The implementation of the Act today reflects the mid-course corrections we recommended, and this Subcommittee adopted, in 1977. These corrections did not modify or delay any of the basic objectives of the Act, but made it more effective.

Clearly, the most far-reaching and important 1977 amendments to the Act were those which distinguished between the treatment requirements for toxic and conventional pollutants. In 1977, Congress recognized the need to address the problem of toxic pollutants, while at the same time selectively reducing excessive regulation of conventional pollutants. Congress determined that the costs of additional treatment should not be excessive in light of the effluent reduction benefits to be achieved. Thus, Congress created the concept of BCT -- best conventional technology. At the same time, Congress decided to retain technology-based limitations as the basic foundation of the Act. This is a decision that API/NFPA supported in 1977 and continue to support today.

Four years ago API/NFPA established the API/NFPA Clean Water Act Issues Task Group, which began an intensive review of the Clean Water Act in order to determine what changes, if any, were necessary to improve its effectiveness. The Task Group looked, in particular, for additional opportunities to apply the guiding 1977 philosophy of "avoiding treatment for treatment's sake."

After concluding the review, API/NFPA believe that the Act can be more effectively focused in two ways: (1) eliminating costly and unnecessary requirements which do essentially nothing to improve water quality; and (2) concentrating the decision-making process at the most efficient level of government to deal with a particular program -- often the state or local agency.

Representatives of the forest products industry testified before this Subcommittee on several occasions in 1983 in support of a limited number of modifications to the Act. Attached to this statement are copies of those previous statements submitted during the 98th Congress. We will not repeat those comments provided by our previous testimony, except to incorporate them by reference in this submission.

Two years have now passed, and time and other events have resolved some of the issues of previous concern. The API/NFPA

Clean Water Act Issues Task Group met in December 1984, reviewed the Act, and again concluded the Act is fundamentally sound. API/NPPA continue to support its concepts.

As we noted in our testimony in 1983 there are a few modifications, however, which if enacted would enable the Act to be more effectively implemented. The amendments recommended by API/NPPA are few in number and modest in their impact. They constitute a further refinement of the Act. In the following statement for the record, we will discuss the changes we advocate. We will also review those provisions of interest to us in S. 53 and S. 652, bills amending the Clean Water Act which have been introduced in the 99th Congress by Senators Stafford and Chafee. Finally, we will briefly discuss a number of issues of concern to us that have been raised in recent years during Clean Water Act deliberations. By and large, API/NPPA believe the Subcommittee has responded wisely to these issues, either through inclusion or omission of several provisions from the Subcommittee's proposed bills.

III. API/NPPA PRIORITY LEGISLATIVE ISSUES

At the conclusion of our own review of the Clean Water Act we identified six areas where modest reforms would be helpful: (1) extending the BAT/BCT compliance deadlines; (2) clarifying indirect discharge of conventional pollutants; (3) lengthening the life of NPDES permits from five to up to ten years; (4) eliminating redundant EPA review of state-issued NPDES permits; (5) extending the §301(k) deadline to include BCT innovative technology as well as BAT; and (6) clarifying the availability of §302(b) hearings in delegated states prior to a discharger being required to go beyond the BAT level of control for water quality reasons. Below, we provide our views on the best way to deal with each of these areas of concern.

A. BAT/BCT Industrial Compliance Deadline Extension

The extension of the current July 1, 1984 BAT/BCT compliance deadlines represents an issue where there appears to be a general consensus concerning the need for Congressional action. S. 53 would amend the current Act, requiring compliance with BAT/BCT requirements, "not later than three years after promulgation of the effluent limitations, or three years after July 1, 1983, whichever is later (but in no case later than July 1, 1987)."

Section 4 of H.R. 8, the House bill introduced by the leadership of the House Public Works and Transportation Committee, takes a different approach and would amend the current Act to require compliance with BAT/BCT requirements within three years and six months after EPA issues the effluent limitation guidelines pertinent to a particular industry.

Both of these proposals to extend the compliance deadline dates evolved during the 98th Congress as realistic responses which took into account the delays experienced by EPA in promulgating BAT/BCT effluent guidelines. Simply stated, industry will have insufficient time to meet the present compliance deadlines based upon EPA's published time schedule for promulgating the BAT/BCT effluent guidelines.

During the last Congress, API/NFPA supported the approach taken by the Senate and continue to support the concept. The identical provision has been included as Section 104 in S. 53. However, almost two years have passed since the Subcommittee first reported this provision. While EPA has published a number of effluent limitation guidelines, they have not completed six major industry categories. Therefore, we recommend a July 1, 1988 date be substituted for July 1, 1987 as presently included in Section 104. In our view the approach used in S. 53, but with a one year modification of the date to reflect current realities, would provide industry with a date certain and sufficient lead time to achieve compliance with BAT/BCT requirements, while still retaining a statutory compliance deadline to encourage EPA to move promptly toward promulgation of final effluent limitation guidelines for all industrial categories.

B. Clarification of Indirect Discharge of Conventional Pollutants

We are pleased that both Section 7 of S. 53 and Section 6 of H.R. 8 include a provision clarifying that publicly-owned municipal treatment works should not require pretreatment of conventional industrial pollutants in lieu of proper operation and maintenance of the treatment works.

In general, API/NFPA members that discharge into POTW's do not discharge toxic pollutants. Most of our industry effluents are characterized by the presence of conventional pollutants such as Biochemical Oxygen Demand (BOD) or total suspended solids. These pollutants are similar in many respects to domestic wastes, and are compatible with POTW treatment capabilities. Thus, EPA actions which have encouraged or required pretreatment of these conventional wastes are of critical concern to API/NFPA.

The House/Senate Conference Report accompanying the 1972 Act clearly states that:

> Pretreatment of biological waste that is compatible with the treatment provided by a publicly-owned waste treatment plant into which such waste is introduced may not be necessary . . . . In no event is it intended that pretreatment facilities be required for compatible wastes as a substitute for adequate municipal waste treatment works. (Leg. History; 1972 FWPCA; Vol. 1; page 313)

In our view, Congress was correct in encouraging the joint treatment of similar municipal and industrial wastes wherever possible as the most cost-effective approach to regional treatment needs. In some cases, there is also a technical benefit to this approach. Many industrial wastes, although highly treatable and biodegradable in biological systems, lack nutrients such as nitrogen and phosphorus compounds. Domestic wastes have an excess of these compounds. It is therefore very efficient to treat both categories of wastes by mixing them in a common treatment facility.

Similar language was included in the 1980 Third Circuit Court of Appeals settlement agreement resolving a number of general pretreatment regulatory problems. EPA agreed to include the following comment in the revised regulations:

> "This provision is not intended to require pretreatment for compatible wastes as a substitute for adequate municipal pretreatment. When difficulties arrive in meeting NPDES permit conditions, it is the responsibility of the POTW to come into compliance with its permit. The POTW should consider a solution that is cost-effective and equitable and consistent with the goal of joint treatment."

However, the comment was later removed from the regulations without a reasonable explanation for that action.

The deletion of that policy statement has had a significant impact. For even if EPA's unwritten policy has been to encourage joint treatment, actual practice at the regional and state level since 1978 has been to encourage cities with inadequate or poorly operated POTW's to require pretreatment of conventional pollutants by their customers, rather than to correct the problem of the POTW.

Both the Senate and House bills to amend the Clean Water Act (S. 431 and H.R. 3282) considered in the previous Congress included a provision designed to clarify this issue. When asked by Congressman Roe during the House Public Works and Transportation Committee's mark-up in May 1984 as to the interpretation and scope of the proposal, the EPA Office of Water responded:

> ". . . Our reading of this language is that it merely restates what is current practice and does not alter or restrict any of the existing authorities of the Administrator or the POTW. The provision makes clear that when a POTW is failing to meet its permit limits due solely to some failure by the POTW, the Administrator should not require pretreatment of conventional pollutants by indirect dischargers to remedy that problem. This provision recognizes that in such circumstances the burden of correcting the problem may more appropriately lie with the POTW itself through adjustment of its operations. This reflects on our current policy that determining how to resolve such problems is a matter of local choice by the POTW. The POTW may decide to require pretreatment or it may improve or expand its own treatment as an appropriate remedy.
>
> ". . . The provision would not relieve any indirect dischargers of their obligation to comply with all federal, state and local pretreatment requirements. The Administrator's enforcement authorities against dischargers or municipalities under the Act are not limited by the provision. Nothing in this section restricts a POTW from imposing any treatment conditions it chooses on its contributors.
>
> "Given its narrow focus, the provision appears to us to be a reiteration of the Agency's position that EPA should not impose pretreatment on indirect dischargers to correct unrelated operational problems at the POTW."

Some may question the necessity for continued inclusion of this provision if it is a restatement of the Agency's position. Unfortunately, there continues to be a high level of inconsistency in the application of this policy at the EPA regional offices and the states. Therefore, the clarification as developed by this Subcommittee during the last Congress continues to be necessary in order to resolve the issue. Consequently, we are pleased that language has been included in both S. 53 and H.R. 8 which makes it clear that Congress does not intend EPA to require pretreatment of compatible pollutants that could reasonably be handled by a well designed or operated POTW. The provision is tightly drafted in order to: (1) assure that dischargers of conventional wastes comply with local pretreatment programs; and (2) preserve a municipality's options in meeting its own permit requirements. We strongly support the continued inclusion of this provision by the Subcommittee in order to assure correction of a vexing problem of long standing with EPA's administration of the general pretreatment program.

C. NPDES Permit Term and Reopener Provisions

The National Pollutant Discharge Elimination System (NPDES) -- perhaps more than any other Clean Water Act program -- has been complicated by numerous, and often conflicting, administrative reforms, rulemaking actions, and judicial decisions. Under current procedures, it may take up to three years to negotiate a five year NPDES permit for an industrial facility.

One change that would substantially reduce the current administrative burden associated with the NPDES program involves extending the term of NPDES permits to up to ten years. This concept is reflected in both S. 53 and H.R. 8.

For EPA and the state agencies assigned the responsibility of issuing NPDES permits, extending the length of the permit would allow the staggering of permit renewals and thus reduce the annual permitting workload. This change would also prevent large permit backlogs from accumulating in the future.

In addition, from industry's perspective, the ten year permit would recognize that pollution control investments are expensive, and that once made, the discharger requires a reasonable certainty that his investment will have a useful life before he is required to make a new one. Moreover, the ten year term is particularly useful in providing an industry a longer time against which to write-off the cost of the pollution control equipment required by the permit.

The question of lengthening the term of the NPDES permit invariably raises the issue of appropriate reopener provisions to ensure necessary environmental protection. Unfortunately, the approach taken in S. 53 is extremely complicated and ultimately undesirable. S. 53 would modify Section 402(b)(1)(B) of the Act to extend the life of NPDES permits from the current five-year term to "fixed terms not exceeding ten years." The length of permits which involve waivers or other modifications would be left at five years.

Our problems arise with the second portion of the amendment which would create a new Section 402(b)(1)(D) requiring that permits:

> (D) shall be promptly modified when new or revised requirements under Sections 301, 302, 303, 304, 307, 403, or 405 are established which are more stringent than any requirement in the permit or which control pollutants not limited in the permit and such modification implements these new or revised requirements. (Emphasis added)

This provision creates a mandatory permit reopener any time there is a change in applicable effluent limitations, water quality standards, ocean discharge criteria, or sewage sludge disposal regulations.

In our view, this amendment could work to destroy much of the stability of the current five year NPDES permit rather than provide additional certainty through the ten year term.

Specifically, a mandatory reopener provision, as envisioned in S. 53, raises four major concerns.

First, the paper industry -- as well as a number of other dischargers of conventional pollutants -- hold existing Best Professional Judgment (BPJ) permits, as the Best Conventional Technology (BCT) effluent limitation guidelines have not yet been issued. Under EPA's current regulations, these permits would be allowed to run out their five-year term before new permit limitations based upon the guidelines are required.

S. 53 would require that EPA reopen existing permits for dischargers of conventional pollutants immediately upon publication of applicable BCT guidelines. This concern would be shared by any industry that is awaiting its BAT guidelines, and: (1) has a large number of Best Professional Judgment (BPJ) permits; or (2) is currently negotiating BPJ permits for toxic pollutants not covered by §307(a).

Second, S. 53 would require that a permit be reopened each time a new water quality standard is issued that affects the permit. Under EPA's current regulations, this is not required for conventional, nonconventional, or toxic pollutants not regulated under §307(a). (Section 122.62(b) of EPA's regulations already imposes this requirement for health-based toxic standards developed under §307(a).) The additional uncertainty created by extending this requirement to conventional pollutants (for which there are numerous applicable water quality standards), as well as nonconventional pollutants, outweighs any of the benefits or economies to be gained by a ten-year permit.

Third, the mandatory reopener and immediate applicability of new effluent limitation guidelines and water quality standards will require permittees to negotiate detailed compliance schedules each time a change is made. Under the current regulations, for conventional, nonconventional, and §301(b)(2) toxic pollutant control requirements, a permittee can utilize the remaining life of his existing permit to begin the process of complying with any such new requirements.

Fourth, the principal advantages -- indicated above -- of a longer permit term involve: (1) the savings in EPA and state staff resources; and (2) a greater degree of certainty for industry. However, the mandatory reopener included in S. 53 allowing EPA no flexibility, would significantly increase the manpower burden necessary to respond to new permit requirements, and decrease the certainty associated with holding an approved, fixed-term, five-year permit.

In summary, S. 53 would confound, rather than simplify, the NPDES permit process. The mandatory permit reopener in S. 53

would make a virtual shambles of the carefully crafted reopener provisions in EPA's NPDES permit regulations. Such a reopener -- passed by the Senate Committee in 1983 with little discussion, and no data to support its sweeping scope -- would involve EPA, the states, and permittees in an endless series of permit negotiations with little or no attendant environmental benefit.

API/NFPA strongly oppose this provision of S. 53. We urge the Subcommittee during its deliberations to revisit this issue. We concur in the necessity of including a mandatory reopener provision for §307(a) toxic effluent standards. If the Subcommittee is insistent on including a number of other reopener provisions in order to provide some stability to the system, API/NFPA suggest that a five year "floor" be included in the permit for conditions other than changes in §307(a) standard. After the first five years, reopening of the permit for other requirements of the Act should be at the discretion of the Administrator.

D. EPA Review of State-Issued NPDES Permits

Since the regulations implementing the NPDES program were first issued in the early 1970's, thirty-five states have moved to take responsibility for administering the program and issuing NPDES permits. A number of these states now have almost twelve years of experience with the program. Nevertheless, EPA still reviews and approves each state-issued NPDES permit. This dual review of state NPDES permits often involves EPA, state agencies, and permittees in time-consuming two or three way negotiations over Best Engineering Judgment type of permit conditions.

In many cases, the state agency permit writer who is most familiar with local conditions is in the best position to render a technically correct decision on a particular matter. EPA's review serves only to delay the process, and expend valuable federal and state agency staff time.

API/NFPA believe that the time has come to step back and take a look at the proper role that EPA should play in the day-to-day administration and oversight of state-administered NPDES programs. The NPDES program has reached a sufficient level of maturity at the state level so that EPA review and approval of every state-issued NPDES permit is no longer necessary.

Rather, for those states that have effectively administered the NPDES program for more than three years, EPA's responsibility should become one of conducting a periodic program audit, rather than reviewing and approving either all, or selected, state-issued permits. If the periodic program audit turns up instances of ineffective state permit administration, EPA should have the right (after a hearing) to: (1) withdraw the state's permitting authority; or (2) return to reviewing and approving each state-issued permit for a probationary period.

This change will have two important advantages. First, the program audit would eliminate much of the manpower burden incumbent on EPA review and approval of state-issued NPDES permits. At the same time, EPA would still be assured an

NPDES program. Second, permittees would no longer be caught in "best engineering judgment" disputes between state and federal permit writers on permit conditions not subject to uniform national standards.

We would like to work with the Subcommittee in developing an approach that would provide an option for periodic EPA audits of state NPDES programs, in lieu of EPA review of state-issued NPDES permits.

At a minimum, we urge the Subcommittee to consider modifications to §402(f) to require EPA to implement this Section of the Act. Under the current law, EPA is required by §402(f) to promulgate regulations which identify categories of point sources for which the Agency will waive its review and approval of state-issued NPDES permits authorized under §402(d) of the Act. Even though §402(f) was passed as part of the 1972 Act, EPA has never developed regulations to implement the Section, nor identified categories of discharges for which the Agency will waive its review of state permits.

We suggest the following modification to §402(f) to reaffirm Congressional intent that EPA move to implement the requirements of this Section in an expeditious fashion:

> [The] Not later than 180 days after the enactment of the Clean Water Act amendments of 1985. The Administrator shall promulgate regulations establishing categories of point sources which he determines shall not be subject to the requirements of subsection (d) of this section in any state with a program approved pursuant to subsection (b) of this section. The Administrator may distinguish among classes, types, and sizes within any category of point sources.

In addition, in the case of states where EPA must still approve transfer of the NPDES program, we recommend the following amendment to Section 402(e) to accomplish a similar purpose:

> In accordance with guidelines promulgated pursuant to subsection (h)(2) of Section 304 of this Act, the Administrator is authorized, and shall consider waiving as appropriate in the case of each state submitting a program under subsection (b) of this section, to waive the requirements of subsection (d) of this section at the time he approves a program pursuant to subsection (b) of this section for any category (including any class, type or size within such category) of point sources within the state submitting such program.

E. Extension of Section 301(k) Deadline to Include BCT Innovative Technology

Under §301(k) of the Clean Water Act, an industrial discharger that is subject to the requirement of achieving BAT limitations under §301(b)(2) of the Act may request a compliance extension to no later than July 1, 1987, for the installation of an innovative technology. To qualify for such an extension, the innovative technology must either produce a significantly greater effluent reduction than BAT or achieve the same level of effluent reduction as BAT at a significantly lower cost.

In the final regulations implementing this provision (49 Fed. Reg. 25978 June 25, 1984) EPA rejected the recommendation that such compliance extensions under §301(k) should be available for conventional pollutants as well, on the grounds that legislative history is not clear as to the intent of Congress to make §301(k) extensions _directly_ applicable to BCT limitations.

API/NFPA believe omission of BCT from §301(k) was an oversight, as §301(k) was considered by the House and Senate conferees in the 1977 Conference prior to the resolution of the BCT issue. This argument was submitted to EPA during the rulemaking.

In implementing the regulation, EPA expressed the opinion that the legislative history was not clear, but that the Agency has sufficient authority to issue administrative orders under §309(a)(5)(A) to those facilities where, "(1) BAT pollutants constitute the major portion of the facility's discharge, and (2) it is unreasonable to treat BCT pollutants separately." API/NFPA do not disagree with this authority, and recognize in many instances this may resolve the compliance deadline issue in a facility operating with both BAT and BCT effluent guidelines. However, such a ruling provides no incentive for creative, innovative approaches to treatment in the BCT area alone, which is the situation in most of the forest industry facilities.

The July 1, 1987 deadline needs to be updated to mandate compliance within three years after the BAT/BCT compliance deadline. API/NFPA urge the Subcommittee to make such an update and extend the applicability to BCT effluent dischargers as well.

F. Clarification of the Availability of Section 302(b) Hearings in Delegated States Prior to a Discharger Being Required to Go Beyond the BAT Level of Control for Water Quality Reasons

The Best Available Technology (BAT) level of treatment was clearly established by the Congress as a stringent level of control. Recognizing that pollutant control requirements beyond the BAT level could have severe adverse economic impact on a point source subject to such requirements, the Congress provided for a hearing in §302(b) of the Act before EPA could require the discharger to install or initiate such treatment.

The public hearing would be held in order to balance the relationship between the social and economic benefits of meeting the water quality standard in question against the social and economic costs, including the possible economic dislocations to the affected community. The standard would not be applied if the benefits of the additional treatment requirements beyond BAT are not worth the costs of their application. The required hearing is an essential part of the process to determine whether additional controls are justified.

Many states have enacted water quality standards which are more stringent than necessary to protect designated water uses. If an industrial discharger is required to go beyond the BAT level of control to meet these standards because of an EPA determination, the §302(b) hearing becomes available.

The majority of states have now been delegated authority to run the NPDES program, so that final action is taken by the state rather than EPA. Unfortunately, it is not clear that such a hearing is also available when a state agency, rather than EPA, establishes such water quality-related permit conditions. This is no reason for the same right to a hearing not to apply in both instances.

API/NFPA recommend that the Subcommittee amend §302(b) to make it clear that its requirements also apply when permitting authority has been delegated by EPA to state water quality agencies.

IV. ISSUES OF CONCERN TO THE FOREST INDUSTRY RAISED IN S. 53 AND S. 652

S. 53 and S. 652, the two bills introduced by Senators Stafford and Chafee currently being considered by the Subcommittee on Environmental Pollution, raise two issues -- "antibacksliding" and nonconventional pollutants -- which API/NFPA believe can be best addressed by being removed from legislative consideration at this time.

A. Antibacksliding

S. 53 contains a provision designed to deal with the maintenance of existing NPDES permit conditions. Section 114 of the bill would amend the NPDES permitting authority in §402 of the Clean Water Act to prohibit renewed, reissued or modified permits from containing less stringent effluent limitations than were in the original permit.

This is a modification of the antibacksliding language included in S. 431 during the 98th Congress (the Committee bill amending the Clean Water Act). API/NFPA strongly opposed that provision, as it would have prevented any increase in the allowable daily discharge limitations in NPDES permits, regardless of the justification for such increase. It would also have prevented changes in any other permit conditions (such as monitoring and reporting requirements, or limitations on bypasses) which would have been considered "less stringent."

API/NFPA, along with a number of other industry groups as well as other interested parties, strongly indicated their opposition to the provision included in S. 431. In recognition of a number of the problems raised by the proposed language, the Senate Environment and Public Works Committee and staff spent considerable time working with industry, the environmental community and other groups in an effort to develop a more workable approach. The Subcommittee members and staff are to be commended for their efforts, now reflected in S. 53's Section 114. This provision, while designed to restrict "backsliding," does recognize the legitimate necessity for changes in permits under limited circumstances.

However, there are a number of reasons why API/NFPA continue to believe it would be preferable to remove the provision from legislative consideration.

Several examples of the type of changed circumstances which might justify increased permit limitations involve increased production or changes in -- or the addition of -- manufacturing processes. Permittees will not be able to increase their production or change their processes unless they are allowed to increase the mass limitations in existing permits. They would, of course, still be required to maintain the effluent limitation guidelines (pounds per ton) issued by EPA for the appropriate industrial categories or subcategories.

Other examples of appropriate reasons for modifying permit limitations include: (1) mistakes in setting original limitations; (2) changes in the level of pollutants in intake waters; or (3) changes justified by improved water quality modeling or monitoring.

The language of Section 114 could also discourage the future imposition of case-by-case effluent limitations in permits. Permit writers may delay issuing renewed permits rather than issue a permit with case-by-case BAT limitations, since such limitations would then be permanently fixed in the permit even if they later proved to be unreasonable. Permittees would tend to resist and delay case-by-case permits as long as possible, to avoid accepting limitations more stringent than those that the guidelines might later require of their competitors.

Perhaps the most important polilcy reason to omit this provision is that if BPJ permit limitations, once established, could never be relaxed, companies that moved first to negotiate their NPDES permits and commence the required treatment, prior to the issuance of national guidelines, would be at a disadvantage in comparison to plants which have delayed this permit process and the installation of necessary controls. In such cases, the

the installation and operation of more extensive treatment than required by the national guidelines -- where such treatment is not needed to protect water quality standards -- could be both unfair and unnecessary and could place a facility at a competitive disadvantage. In fact, such a requirement is in direct conflict with one of the basic premises of the Clean Water Act -- the requirement of uniform technology-based standards developed on an industry-by-industry basis.

Similarly, there may be instances of prior inaccuracies in establishing effluent limitations necessary to meet water quality standards, or where improvements in water quality have occurred due to improved treatment by others or control of nonpoint sources. In these cases it may not be reasonable to categorically refuse to relax stringent treatment requirements which were previously necessitated by water quality problems. Clearly, in such cases permit writers should be afforded some measure of flexibility to respond to local conditions.

Finally, the antibacksliding provision is one of the issues before the D.C. Circuit Court as part of the NPDES litigation. EPA, the National Resources Defense Council (NRDC) and a number of industries including API/NFPA, are parties to this suit. Traditionally, the Congress has been reluctant to further complicate issues that are in litigation by addressing them simultaneously in legislation. API/NFPA would urge the Subcommittee to set this provision aside.

B. Nonconventional Waiver Deadline

Section 8 of S. 652 as introduced by the Subcommittee Chairman, Senator Chafee, includes a provision which would prohibit application of a waiver under §301(g) (nonconventional pollutants) after January 3, 1985. Inclusion of such a provision in legislation at this time is premature and API/NFPA urge that Section 8 be removed from the Subcommittee's consideration.

In his floor statement accompanying the introduction of S. 652, Senator Chafee expressed concern that a number of the nonconventional pollutants are "highly toxic." If a pollutant is harmful or has toxic effects it should be designated a toxic and removed from the nonconventional category. Such listing would remove it from the §301(g) waiver applicability.

Senator Chafee further noted in his floor statement that, "These pollutants are largely unknown and very little data exists on their toxicity and effect on human health." The 1977 Clean Water Act conferees wisely recognized there were a number of pollutants about which there was not yet sufficient data to determine if they were, indeed, toxic. The committee established the third category of pollutants -- nonconventionals -- in order to deal with these yet "unknown" pollutants. Sufficient safeguards are included in §301(g) so that such a pollutant must be treated to the BAT level unless the permittee is able to prove that a lesser level of treatment will result in no impact on water quality.

Our understanding is that EPA has concerns with §301(g) because of the potential resource ramifications on the Agency if they are flooded with a large number of nonconventional waiver applications. To our knowledge no data exist to substantiate such a concern. Further, our reading of the §301(g) provision is that it gives the Administrator considerable flexibility in determining which pollutants he might consider for a waiver. The proposed regulations published by EPA (49 Fed. Reg. 31462 1984) to implement §301(g) are not written in a fashion designed to encourage waiver applications. In fact, in our comments on the proposal, API/NFPA noted that ". . . each provision by itself, while very stringent, does not seem entirely unreasonable, but when taken as a whole has a synergistic effect. The total becomes more than its parts. It can only result in no applicant being able to meet all the requirements for such a waiver when coupled with the short time frame for such applications."

To arbitrarily close off the waiver possibility at this point will, in effect, force "treatment for treatment's sake" for those pollutants currently considered to be nonconventional but which at a later time may be determined to be non-toxic and not harmful to human health. Such action will result in enormous costs, and in many cases, with no benefit to the environment.

API/NFPA believe the EPA Administrator has sufficient authority and flexibility in order to determine which pollutants are appropriately addressed in the nonconventional category. At the same time §301(g) does operate as a "safety valve" in order to possibly prevent the requirement of unnecessary treatment. Therefore, API/NFPA urge that Section 8 be removed from further consideration at this time.

V. OTHER ISSUES

API/NFPA are well aware of the efforts expended by the Subcommittee during the 97th and 98th Congresses in an effort to develop responsible amendments to the Clean Water Act.

Upon reflection and review of the vast number of issues, testimony and debate on the Clean Water Act in the last few years, API/NFPA conclude that on balance the Subcommittee has responded in a reasoned, responsible fashion to an array of subjects. The following comments briefly address those issues of interest to the forest industry.

A. Nonpoint Source Management Program

API/NFPA have been actively involved with state and federal nonpoint source pollution control efforts since 1975. We are interested in controlling nonpoint source pollution in order to: (1) foster good forest management; and (2) avoid at our manufacturing facilities unnecessary treatment -- beyond Best Conventional Technology -- for biochemical oxygen demand and suspended solids in streams where uncontrolled nonpoint sources contribute to these water quality problems.

The forest industry worked closely with this Subcommittee during the last Congress in an effort to develop a reasonable proposal for dealing with nonpoint sources (our testimony presented during the 98th Congress before both the Senate and House Committees is attached). Section 112 of S. 53 is identical to S. 2006, as reported by the Environment and Public Works Committee in 1983.

Section 112 is designed to provide a modest amount of federal direction and support to states in order to assist in the implementation of nonpoint source control programs on priority water bodies. We believe such a program is an important beginning for the long-range task of improving and protecting the nation's waters impacted by nonpoint source pollution. API/NFPA supported S. 2006 and continue to concur with its reasoned approach.

B. Pretreatment

This industry, along with many other industries as well as state and local groups, urged Congress to enact legislation designed to correct the basic statutory flaws in the pretreatment program. Several recommendations were given serious consideration, but never enacted. However, the Subcommittee's consideration of such legislation did serve as a partial impetus to encourage EPA to establish the Pretreatment Implementation Review Task Force (PIRT). While EPA has not yet published the final PIRT report, if the Agency implements the recommendations of the Task Force, a number of the fundamental weaknesses of the program may be resolved. The Subcommittee's decision to hold a legislative solution in abeyance may have served to force EPA, as well as the vast community impacted by the program, to negotiate in good faith to resolve a number of the implementation problems.

C. Dredge and Fill Program (Section 404)

A wide variety of organizations urged the Congress to change the Dredge and Fill Program (Section 404) during the last two Congresses. Again, the Subcommittee carefully reviewed a number of proposals. As the Subcommittee knows, API/NFPA have been deeply involved since 1975 in the implementation of the §404 program. We testifed on this program in 1975, 1977, 1979 and 1983. As a result of clarifications in 1977, many normal forestry, farming and ranching activities are currently exempt from §404 permit requirements. Therefore, our industry faces neither the degree of exposure to the program that we did in the past, nor the exposure presently faced by some other industry groups. We opposed legislative change to the program during the last Congress and continue to do so now on the grounds that such change would be premature.

Again, we commend the Subcommittee for its wisdom in reviewing the issues and concluding the program needs a period of relative administrative stability before a comprehensive Congressional review is begun. Senator Chafee expressed frustration with EPA and the Corps of Engineers in his floor statement on March 7, 1985 because of their continuing disagreement in determining the administration of the §404 program. He further announced he expected to hold oversight hearings later this spring.

Legislative action on §404 may ultimately be necessary. Perhaps, however, the proposed oversight hearings will help to serve as an inducement to the involved agencies to resolve their differences. API/NFPA continue to believe it is preferable for the Subcommittee to defer legislative action at this time.

D. Construction Grants Study

Title II of the Clean Water Act was last amended in 1981 when Congress made a number of reforms to the program, including reducing the categories of construction eligible for federal funding and reducing the federal share from 75% to 55%.

Recognizing the shifts occurring in the level of federal spending, over a year ago EPA took the initiative and set up a task force to study alternative approaches to funding the construction grants program. The study includes a number of recommendations as to how best to bring the federal funding involvement in the program to a close. Senator Chafee's bill (S. 652) also recommends changes to the program.

In light of the need to make adjustments in order to reduce the federal deficit as well as assuring that the remaining needs of the municipal systems are provided for in an orderly fashion, API/NFPA is pleased to note the level of effort from all parties (Congress, EPA, the public) to develop a reasoned phase-out of the high level of federal involvement in the construction grants program. API/NFPA have suggested for a number of years that the Clean Water Act could be implemented more effectively and more economically if greater responsibility and authority was returned to the state and local level.

While considerable questions remain on the appropriate levels of funding and the respective roles and responsibilities at the federal, state and local levels, both EPA and this Subcommittee should be commended for their efforts to address this problem. API/NFPA believe the hearings scheduled by the Subcommittee will afford ample opportunity for clarification of these remaining issues.

VI. CONCLUSION

In conclusion, we reaffirm our support for the 1972 Federal Water Pollution Control Act and the water pollution control programs that have resulted since its passage. The 1972 Act and its 1977 amendments provide the proper basis for additional water quality improvement as we move through the 1980's. At the same time, we believe that modest refinements to a number of Clean Water Act programs will enhance, rather than inhibit, this desirable goal. We look forward to working closely with the Subcommittee to craft modest changes to the Act.

NOTE. Attached to this statement were statements presented at Environment and Public Works Committee hearings on Clean Water Act Amendments (April 7, 1983) and Nonpoint Source (July 19, 1983). The statements referred to appear in the proceedings of those hearings and are not reproduced here.

The Brooklyn Union Gas Company
195 MONTAGUE STREET
BROOKLYN, NEW YORK 11201

STATEMENT OF
FRED J. GENTILE,
SENIOR VICE PRESIDENT
of
THE BROOKLYN UNION GAS COMPANY
before the
ENVIRONMENTAL POLLUTION SUBCOMMITTEE
of the
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
on the
ALLOWABILITY OF UTILITY RELOCATION COSTS
UNDER THE CLEAN WATER ACT
CONSTRUCTION GRANTS PROGRAM
March 26, 1985

About three years ago the Brooklyn Union Gas Company advised this subcommittee concerning two issues: one was the federal government's failure to treat gas utility relocation costs incurred because of Clean Water Act construction projects in a consistent, just, and equitable manner, and the second was the harsh and disproportionate economic impact that that failure has had on gas utility customers in general, and Brooklyn Union's customers in particular.

My statement today again emphasizes these issues, but now with cautious optimism that congressional assistance will be forthcoming as to the Red Hook and Oakwood Beach projects. To date, these projects have caused about $2.250 million in gas utility relocation expenses, expenses which would not have been incurred but for the projects. By the time the projects are completed, we anticipate relocation expenses to total some $15.750 million. Our customers, about 40 percent of whom are low-income families or elderly citizens living on fixed incomes, will have to pay these costs in increased utility bills. The Red Hook and Oakwood Beach projects benefit the entire population of New York and the Hudson Valley, yet only the residents of Brooklyn, Queens and Staten Island, who are customers of The Brooklyn Union Gas Company pay for these benefits twice, once when they pay their federal taxes and again when they pay their gas bills.

The injustice resulting from this situation was exactly what Congress intended to prevent when it enacted a statutory mandate in the Clean Water Act construction grants program which requires the federal government to reimburse states and municipalities for 75 percent of the costs of federally-financed water and sewage treatment projects. Congress recognized that restoring and maintaining the nation's water was a national problem, the solution to which was in the national interest. Federal cost-sharing was designed to prevent any one state's or municipality's citizens from bearing a disproportionate share of the costs of such projects. The present posture in which Brooklyn Union finds itself is not only unjust and inequitable, but it is also directly contradictory to the spirit of the Act.

BACKGROUND

Each year, water and sewer construction projects financed by the federal government under the Clean Water Act necessitate the relocation of gas facilities owned by public utility companies such as Brooklyn Union. The relocation process ranges from providing protection or adjustment of existing gas facilities to complete relocation and replacement of the facilities. The cost of protecting, relocating and replacing gas lines located in city streets to make way for Clean Water Act construction projects is as much an expense of federal treatment and sewer construction projects as the cost of labor and materials employed in those projects. Like labor and materials, gas utility facilities relocation is integral to the successful completion of the projects, and like expenses for labor and materials, gas utility relocation expenses would not have been incurred but for these projects. Yet, in most cases, and in the case of those projects affecting Brooklyn Union in particular, the federal government will reimburse 75 percent of a project's labor and materials expenses yet refuses to reimburse any of the gas utility relocation expenses incurred on the very same project.

A. The Magnitude of Utility Relocation Costs Caused by EPA-Assisted Projects: Brooklyn Union

Under the Clean Water Act, EPA is presently funding two large water pollution control projects that affect Brooklyn Union's service area. These are the Red Hook and Oakwood Beach water pollution control projects. These projects require substantial relocation of gas utility lines at considerable expense to Brooklyn Union. For example, for every $100.00 the government spends on these projects, Brooklyn Union is forced to spend approximately $9.53 in gas utility relocation expenses. Thus, in connection with the Red Hook project, Brooklyn Union will incur an estimated $3.670 million in relocation expenses for work that would not be necessary but for this federal water pollution control project. Even more significant are Brooklyn Union's utility relocation costs resulting from the EPA-assisted Oakwood Beach water pollution control project in Staten Island. That project will cost Brooklyn Union an estimated $12.080 million in relocation expenses.

There are two important points to be gained from these figures. One is that the gas utility relocation costs to Brooklyn Union are significant. Those costs on the Red Hook and Oakwood Beach projects alone will total $15.750 million. The other is that these costs will be borne solely by Brooklyn Union's customers unless the present law is changed to correct the situation.

B. Current Law: Passing the Utility Relocation Burden of EPA-Assisted Projects from the Federal Government to Local Gas Utility Customers

Under the Clean Water Act, as administered by the EPA's Office of Water and Waste Management, a construction grant program provides federal funding for the construction of municipal treatment works which are required to meet state and federal water quality standards. Under the program, EPA assumes 75 percent of allowable costs of approved construction projects.

The Office of Management and Budget's Circular, A-87 (January 15, 1981), is intended to establish uniform principles and standards for determining allowable costs under grants and contracts with state and local governments. Subsection C of Attachment A of OMB Circular A-87 sets forth the guideline that allowable costs must "be authorized or not prohibited under State or local laws or regulations."[1] The practical effect of this guideline, as interpreted by EPA, has been to allow the federal government to avoid -- through the operation of local property laws -- compensating utilities for relocation expenses incurred as a result of the EPA-assisted construction projects.

The source of the federal government's ability to escape payment for the cost of utility relocation is that under the law of many states, public utilities are required to relocate their facilities to make way for state construction without reimbursement of the costs incurred. The legal theory by which many states, including New York, deny utilities direct compensation for their relocation expenses is that because utilities possess only a "privilege" or "franchise" to locate service lines in the public streets, they operate at the sufferance of the state and do not have the "right" to operate in any particular place. Under this peculiar theory, it is frequently held that the state may require the utility to move its facilities without paying any compensation.[2] As EPA has administered the Clean Water Act, since the state may avoid paying its share of the cost of utility relocation, the federal government allows the full cost of relocation to fall on the utility and its customers.

This practice, by which the federal government fails to pay its fair share, or, for that matter, any share of the cost of a federally-induced project, must be changed.

---

[1] EPA has codified its interpretation of this criterion at Section 35.940-1(k) of Title 40 of the code of Federal Regulations, which states that allowable costs include "Removal and relocation or replacement of utilities, for which the grantee is legally obligated to pay."

[2] One of the peculiarities of this theory is that if the relocation was necessitated by a project conducted directly by the federal government, just compensation would have to be paid. Thus, it is only by funneling the federal money for these projects through the states that the federal government takes advantage of the quirks in local property law and avoids its obligation to pay compensation.

C. The Current Policy Regarding Utility Relocation Costs Is Misguided, Inappropriate, and Inequitable to the Local Gas Utility Customers Who Must Pay More Than Their Fair Share of Federally-Assisted Projects

There are compelling reasons why the government's current policy toward utility relocation expenses should be reversed:

1. As a result of this practice, gas utility customers are forced to pay more than their fair share of Clean Water Act construction costs. The Clean Water Act programs which finance construction projects requiring relocation of gas utility facilities are conceived and designed to benefit the general welfare: "The objective of this [Act] is to restore and maintain the . . . integrity of the Nation's waters." 33 U.S.C. § 1251(a). No special benefit is conferred upon gas utility customers by these projects. Gas utility customers, however, pay twice for these construction projects -- once in the form of federal taxes, and again in the form of increased utility rates. This inequitable burden should be relieved, and the full cost of construction should be spread equally among all taxpayers.

Similarly, the costs of Clean Water Act projects are not born equally by those who reap the benefits of the program. Projects such as those at Red Hook and Oakwood Beach directly benefit all citizens in the Hudson Valley and, at least arguably, the entire northeast United States. To require a select group of individuals -- Brooklyn Union Gas Company customers -- located in a distinct geographic sector -- Brooklyn, Queens and Staten Island -- to pay more than a pro rata share of the project costs clearly places an inequitable and unjust burden on those individuals.

2. The current policy results in discriminatory treatment between gas customers in different states. The present practice of predicating the compensability of utility relocation expenses upon the intricacies of state property laws has created a situation in which some states' utilities are reimbursed from federal funds, while the relocation expense on comparable projects in other states goes uncompensated. The burden of federally-financed construction should not be borne disproportionately by the gas consumers of one state, while similarly situated gas consumers in another are relieved of this burden.

3. The failure to recognize the full cost of public construction leads to economic waste. Public utilities are given no voice in planning federally-financed projects in a manner which might reduce these burdensome costs. The federal government does not intervene to assure that relocation is approached economically and efficiently, as would be the case where federal funds were at stake. And, because the expense of utility relocation is not paid by the state or municipality, local project administrators tend to

be less concerned about the manner in which those expenses might be reduced.

4. The Clean Water Act policy of basing reimbursement of utility relocation costs on the intricacies of state law disrupts the national energy policy. The full cost of relocation, while initially borne as an out-of-pocket expense by the utility, is ultimately paid for by the consumer in the form of higher gas prices. This increment to the price of gas artificially stimulates demand for alternative sources of energy when gas, in reality, may be the most cost-effective form of energy available. As presently administered, the system extracts an extra charge from gas consumers, and confers an economic boon to fuel oil consumers who may well be in the very same geographical class of alleged "beneficiaries" of the Clean Water Act project.

5. The historical quirk which allows some states to avoid payment of utility relocation expenses upholds no public policy and has no rational application to utility relocation necessitated by federal projects. As an historical matter, most utilities, including Brooklyn Union, were invited by the states onto the public way in order that the states might assure their citizenry adequate and efficient utility service. If the utilities -- particularly those asked to operate in metropolitan areas -- had been required to purchase private rights-of-way to lay their lines, the cost would have been prohibitive. The franchise was offered to the utilities as a means of ensuring affordable utility service. Here, anomalously, the federal government is exploiting the nature of the franchise to increase the cost to the consumer of utility services.

Even if it could, in some sense, be said that the utilities, by not procuring private rights-of-way, had entered into the business of providing utility service with the understanding that they would be required to relocate without reimbursement, that "understanding" surely did not contemplate relocation on the scale now required. The outpouring of federal grant money has induced states and municipalities to undertake enormous projects serving federal policies and meeting federal requirements. Neither the utilities, nor the municipalities or states which, at the time of granting franchises, desired to keep the cost of utility services low and the cost of entry into the field relatively small, could have realized the enormity of the yearly relocation expense which federal involvement in public works projects now causes.

In any event, the immediate question is who should now equitably bear the real cost of gas utility relocation -- the natural gas consumer, paying both federal taxes and higher gas utility rates, or the general public, through funds which congress has set aside to finance these projects.

CONCLUSION AND RECOMMENDATION

There is no question that Brooklyn Union customers are presently bearing a disproportionate share of the costs of the EPA-assisted Red Hook and Oakwood Beach water pollution control projects by paying for the cost of relocating gas utility facilities in order to accommodate construction on these projects. When completed the projects will have cost the customers of Brooklyn Union approximately $15.750 million. This inequitable situation can, and should, be changed.

Last year the House of Representatives addressed this inequity by adding § 33 to the Water Quality Renewal Act of 1984 (H.R. 3282). Section 33 would have directed the EPA Administrator to reimburse, at the statutorily applicable federal share, the gas utility relocation costs incurred in connection with the EPA-funded Red Hook and Oakwood Beach wastewater treatment projects. Though H.R. 3282 was not ultimately enacted by Congress, I am pleased to report that its re-introduction in this session of Congress as H.R. 8 again includes the relocation reimbursement provision Brooklyn Union has sought -- now designated as § 34. I respectfully urge you also to consider and include this provision in your version of the Water Quality Renewal Act of 1985.

INTERSTATE CONFERENCE
ICWP
ON WATER PROBLEMS

1620 Eye Street, N.W., Suite 800
Washington, D.C. 20006
(202) 466-7287

EXECUTIVE DIRECTOR
AND GENERAL COUNSEL
John M. Kovalic

CHAIRMAN
R. Timothy Weston
Associate Deputy Secretary
for Resources Management
Department of Environmental Resources
P.O. Box 1467
Harrisburg, PA 17120
(717) 783-5338

FIRST VICE CHAIRMAN
Donald R. Vonnahme
Director
Illinois Division
of Water Resources
2300 South Dirksen Parkway
Springfield, IL 62764
(217) 782-2152

SECOND VICE CHAIRMAN
Douglas G. Whitaker
Assistant General Manager
The Miami Conservancy District
38 East Monument Avenue
Dayton, OH 45402
(513) 223-1271

SECRETARY-TREASURER
Christopher L. Brooks
Assistant Executive Director
Water Resources Commission
P.O. Box 4440
3830 Forest Drive
Columbia, SC 29240
(803) 758-2514

PAST CHAIRMAN
A. Kenneth Dunn
Director
Department of Water Resources
Statehouse
Boise, ID 83720
(208) 334-4437

BOARD OF DIRECTORS
John E. Acord
Assistant Administrator
Water Resources Division
Department of Natural Resources
and Conservation
32 South Ewing
Helena, MT 59620
(406) 444-6627

James Barnett
Executive Director
Water Resources Board
P.O. Box 53585
100 NE 10th Street
Oklahoma City, OK 73152
(405) 271-2551

John P. Fraser
Executive Director
and General Counsel
Association of California
Water Agencies
910 K Street, Suite 250
Sacramento, CA 95814
(916) 441-4545

Dee Hansen
Director
Utah Department
of Natural Resources
1636 West North Temple
Salt Lake City, UT 84106
(801) 533-5356

Dirk Hofman
Deputy Director
Division of Water Resources
Department of Environmental
Protection
1474 Prospect Street
Trenton, NJ 08625
(609) 292-1840

John Morris
Director
Division of Water Resources
Department of Natural Resources
and Community Development
P.O. Box 27687
Raleigh, NC 27611
(919) 733-4064

Charles E. Nemir
Executive Director
Department of Water Resources
P.O. Box 13087
Capitol Station
Austin, TX 78711
(512) 475-3187

April 22, 1985

The Honorable John Chafee, Senator
Chairman, Subcommittee on Environmental
Pollution
United States Senate
Washington, D.C. 20510

Dear Senator Chafee:

Re: S. 53 and S. 652

The Interstate Conference on Water Problems (ICWP) appreciates the opportunity to submit the accompanying comments to the Subcommittee on behalf of its members. ICWP is hopeful that inclusion of the organization's comments in the official hearing record will prove helpful to the Senate in passing legislation to reauthorize the Clean Water Act during the 1st session of the 99th Congress.

ICWP is the independent national association of state, interstate, and regional water administrators concerned with water quantity and quality management, conservation, and development. The association strives to facilitate cooperation and exchange of information among water resources officials and agencies with respect to conservation, use, development, and administration of water and related land resources, the laws governing these matters, and federal-state relationships. ICWP seeks to promote a consensus view on important issues relating to improved water management and to present those views both to the Congress and federal administrative agencies.

ICWP comments on S. 53 and S. 652 are intended to provide the Subcommittee with information on (a) the construction grants program, (b) nonpoint source pollution control proposals, and (c) other general provisions. ICWP has not yet completed its review of S. 793, the Administration's Clean Water Act (CWA) reauthorization bill. Upon completion, comments will be forwarded to the Subcommittee.

Again, ICWP appreciates the opportunity to provide written testimony on this important national issue. Please feel entirely free to contact R. Timothy Weston (717/783-5338), ICWP Chairman, or me if you should wish to discuss ICWP's submission or require further information.

Sincerely,

Joan M. Kovalic
Executive Director and
General Counsel

JMK/akl
Enclosure

cc: Honorable George J. Mitchell
Honorable Robert T. Stafford
Honorable Lloyd Bentsen
Robert Hurley
Phillip T. Cummings
Paul Chimes
ICWP Board of Directors
ICWP Legislative Committee

COMMENTS OF THE
INTERSTATE CONFERENCE OF WATER PROBLEMS
ON S. 53 AND S. 652

• Construction of Publicly-Owned Treatment Works

Comment 1. The Interstate Conference on Water Problems (ICWP) fully supports the five-year extension of the Construction Grants Program proposed by Section 201 of S. 53. In conjunction with the five-year extension and gradual transition phase-out of the Construction Grants Program, ICWP supports continued program funding of at least $2.4 billion annually through 1990. While it is recognized that minor adjustments in the allocation formula may be desirable and necessary, ICWP urges the Congress to recognize and consider the intermediate-range state planning advantages of maintaining consistently fixed percentages and known annual dollar awards when finalizing the allocation formula to be authorized by Section 202 of S. 53.

Comment 2. While not addressed in S. 53, ICWP maintains its support for full continuation of the Section 205(g) state administration program as the most effective approach to realizing Title II municipal construction objectives. ICWP specifically supports the Section 205(g)(1) extension to October 1, 1994, proposed by Section 6 of S. 652.

Comment 3. Establishment of a balanced and fair national approach to address differing regional water quality management needs remains a fundamental issue with the states that comprise ICWP's membership. Two examples, reserve capacity and combined sewer overflows, serve to illustrate the need for the reauthorized Clean Water Act to provide sufficient flexibility to allow principal contributions to water quality problems to be addressed by the states. In the case of states with stable or slightly growing populations and economic bases, funding reserve capacity may not be a critical issue. However, in areas of rapid and continuing growth, the ability to provide new service for expanded loadings is a key variable in attaining and maintaining water quality standards. For certain states, the correction of combined sewer overflow (CSO) problems may represent an extremely cost-effective pollution abatement investment. Accordingly, ICWP encourages the Congress to provide the maximum degree of program flexibility in conjunction with reauthorization. ICWP believes that flexibility is essential to ensure that variable water quality problems are satisfactorily addressed.

Comment 4. ICWP generally supports the establishment of State Revolving Funds (SRFs) as one means of assisting states and local units of government to obtain capital for water quality improvement investments. At the same time, ICWP has several concerns about the program as proposed in S. 652. First, ICWP is concerned that the mandatory program may not allow the state to obtain maximum leverage from local funds. Second, ICWP believes that the capitalization program should be flexible enough to allow assistance to be used for state-determined water pollution control projects and priorities. For example, the control of nonpoint source pollution through fund utilization may, in some states, represent a much more effective investment than POTW construction. Also, states should have the flexibility to fund a particular project or an aspect of a project so that maximum benefit can be obtained from the limited assistance available. Third, ICWP is concerned that the SRF provisions in S. 652 contain no limitation on the period of federal direction and oversight. At a minimum, ICWP believes that the fund should be open for uses other than POTW construction after initial repayment of principal and interest has been made. Ideally, the loan fund should be flexible enough to allow the states to control water pollution through a self-determined combination of desirable point and nonpoint source project investments.

Comment 5. ICWP supports S. 652 language providing state discretion in reprogramming Title II Construction Grant assistance to the SRF. However, ICWP believes that the mixture of loan and grant assistance for project aspects or individual projects should be left to the states and not set by federal law.

- Nonpoint Source (NPS) Pollution Control

Comment 1. ICWP supports the establishment of a nationally effective implementation program to control nonpoint sources of pollution. ICWP is concerned, however, that the language proposed in Section 112 of S. 53 lacks an expression of clear and effective goals. If NPS policy goals are to be more fully developed and .explained in subsequent administrative regulations implementing the proposed section, ICWP strongly recommends that a specific provision allowing state participation in regulation development be included in statutory law.

Comment 2. Many water pollution control agencies now operate various state-authorized administrative, technical, and financial assistance programs to reduce and abate nonpoint sources pollution. In addition, states frequently participate in the development and selection of federal program priorities that help to control, directly or indirectly, nonpoint source loadings. In formulating a national NPS implementation program, ICWP encourages the Congress to recognize the existence of state programs and ensure that new statutory requirements not pre-empt or disrupt on-going state NPS control initiatives.

Comment 3. ICWP supports the NPS consistency provisions for federal activities contained in S. 53.

Comment 4. ICWP supports the permissive authority to utilize local agencies or organizations in developing and implementing NPS control programs contained in S. 53.

Comment 5. ICWP does not believe that the levels of funding authorized under Section 112 of S. 53 are adequate to initiate an effective nonpoint source pollution control program. ICWP is also concerned about limitations on using grant assistance for non-demonstration projects.

- General Reauthorization Issues

Comment 1. ICWP supports extending the authorization period for the Section 106 state water pollution control administration program through 1989 at an annual funding level of $75.0 million as proposed by Section 101 of S. 53. ICWP further believes it important to ensure that the congressionally authorized level of funding is fully appropriated each year.

Comment 2. ICWP supports partial delegation of the National Pollutant Discharge Elimination System (NPDES) as proposed in Section 110 of S. 53 and the anti-backsliding provision presented in Section 114 of S. 53.

Comment 3. ICWP generally supports the concept of dispute resolution expressed in Section 116 of S. 53. However, ICWP recommends that the section acknowledge the existence and promote the use of previously established interstate institutions and authorities such as interagency councils, river basin commissions, and compacts. ICWP believes that existing institutional coordination forums should be used to resolve conflicting issues before EPA is asked to convene a resolution conference. ICWP does not believe that enactment of Section 116 should, in any way, be construed as limiting the ability of any state to seek relief through the judicial process.

Comment 4. ICWP generally supports the proposed Section 108 revisions to the criminal and civil penalty provisions contained in the Clean Water Act. ICWP recommends, however, that explicit language indicating that state civil penalties need not match federal amounts be added to Section 108 of S. 53.

Comment 5. ICWP generally supports the establishment of the revised compliance dates proposed in Section 104 of S. 53. However, ICWP encourages the Congress to recognize that adjusting or moving deadlines can have the undesirable effect of frustrating ongoing state compliance programs and initiatives. ICWP also supports the BAT variance prohibition proposed by Section 8 of S. 652 and the indirect conventional pollutant discharge provisions in Section 107 of S. 53.

Comment 6. ICWP generally supports most of the toxicity provisions contained in Section 106 of S. 53. However, ICWP believes that, rather than requiring an entirely new report, the existing 305(b) biennial assessment process should be used as the vehicle for reporting toxic problems. In addition, ICWP does not believe that it will be possible or, in some cases, even necessary for the states to establish numerical criteria for all of the individual Section 307 toxic pollutants within the time period proposed by Section 106 of S. 53. For certain parameters, narrative toxicity criteria that account for local or regional environmental conditions may be more appropriate and workable. Finally, ICWP does not support the toxic waiver provision contained in Section 106.

Comment 7. ICWP supports continued funding of the General Administration, Clean Lakes, Training and Education, and Research and Development programs, as provided for in Section 101 of S. 53.

Comment 8. ICWP believes that a variety of provisions contained in House bills reauthorizing the Clean Water Act are necessary and should be considered for inclusion in S. 53. Specifically, S. 53 should be expanded to at least include grants to control nonpoint source pollution of lakes, authorizations for the Water Quality Management Planning Program and the Rural Clean Water Program (RCWP), and authorizations for implementing agency agreements to utilize other federal laws to control water pollution.

Comment 9. ICWP's general support for S. 53 is partially predicated on the exclusion of several reauthorization provisions contained in the House bills. Specifically, ICWP does not find any need for and, therefore, cannot support creation of a National Groundwater Commission, a study of dams as point sources of pollution and, a mandatory requirement to pass through water quality management planning assistance.

Comment 10. ICWP strongly supports the need to establish a nationally consistent program to protect groundwater from contamination. However, ICWP does not believe that Clean Water Act reauthorization legislation is the proper focus for addressing groundwater quality programs. In fact, inclusion of groundwater quality protection provisions in the Clean Water Act may have the unwanted effect of promoting further fragmentation of already uncoordinated groundwater quality maintenance programs. ICWP recommends, therefore, that the groundwater quality protection provisions contained in H.R. 6 be addressed in separate legislation confined to the issue of groundwater quality management.

Mining and Reclamation Council of America

Suite 525 • 1575 Eye Street, N.W. • Washington, D.C. 20005 • (202) 789-0220

WILLIAM W. LYONS
Chairman of the Board

DANIEL R. GERKIN
President

April 3, 1985

The Honorable John H. Chafee
Chairman, Environmental Pollution Subcommittee
Environment & Public Works Committee
Senate Dirksen Office Bldg., #410
Washington, D.C. 20510

Dear Chairman Chafee:

On behalf of the members of the Mining and Reclamation Council of America (MARC), I had requested the opportunity for MARC to present oral testimony at the March 26-28, 1985 Environmental Pollution Subcommittee hearings on reauthorization of the Clean Water Act. Although dissappointed at not being granted this request, I fully realize the time constraints which caused its denial. I would appreciate, however, the three enclosures to be entered into the hearing record on our behalf and for your staff to seriously consider the merits of the issues presented.

As you are aware, MARC, a national association of surface coal producers and allied industries has submitted statments and testified before numerous Senate and House hearings over the past several years regarding the reauthorization of the Clean Water Act. The coal mining industry seeks to strengthen the cost effectiveness of the Act while improving our nations waters. In this regard MARC considers the points of; coal remining, the NPDES permit term, and pH effluent limits, as priority for resolution in this Congress. Enclosed are brief position papers which delineate the problem, a solution, and background on each of these important issues. These present constructive suggestions for the coal industry to meet the Act's goals within the unique technological and economic parameter of the coal industry.

It has come to my attention that the Administration's draft bill (Executive Communication 897) addressed the remining and NPDES permit term issues in a reasonable manner and as such I trust that you will incorporate these provisions into any Clean Water Act reauthorization bill. Additionally, given the importance of these matters to our membership, I would appreciate the opportunity for Robert Flagg, MARC's Manager of Technical & Research Services to meet with your staff at their earliest convenience to discuss these issues and to answer any questions. If such a meeting is possible please do not hesitate to call. If time does not permit these meetings we would be happy to discuss these matters over the phone.

MARC appreciates the subcommittee's continuing interest in the attainment of the Act's objectives and the impact of the clean water program on the coal mining industry. The incorporation of the enclosed provisions would be a logical extention of these concerns.

Sincerely,

Daniel R. Gerkin
President

DRG/saf
Enclosures
cc: The Honorable George J. Mitchell, Ranking Minority Member,
Environmental Pollution Subcommittee
The Honorable Robert T. Stafford, Chairman,
Environment and Public Works Committee
The Honorable Lloyd Bentsen, Ranking Minority Member,
Environment and Public Works Committee

NPDES PERMIT TERM

PROBLEM:

The current 5 year lifespan of NPDES permits does not provide industry a sufficient length of time of guaranteed security from changing NPDES standards. Long term operational planning, design and investment decisions are based upon origional permit requirements and capital outlays for necessary technological controls and manpower. However, given that a mines life expectancy is usually in excess of 5 years, the present NPDES permit term provides the potential for a company's long term business assumptions to change every 5 years. This may be devastating to such companies.

SOLUTION:

The NPDES permit should have a lifespan of at least 10 years.

BACKGROUND:

The current 5 year NPDES permit term has the potential to subject a permittee to requirements which may change every 5 years. If permit requirements were made more strict, an operator would be forced to retrofit control technology to comply. Not only is this expensive in its own right, it would require the company to rework its long term operational and financial projections. This has widespread implications especially when one considers that coal supply contracts are often for terms exceeding 5 years as well. New NPDES permit requirements may cause the cost of production to rise unexpectedly. Given these rising costs, a coal company could face severe economic hardships if locked into a coal supply contract at specified prices.

The expansion of the NPDES permit term to at least 10 years will allow industry the opportunity to more realistically and accurately plan, design, and invest in complex control technology and to amortize that capital investment. This would reduce uncertainty and the risk of financial and operational hardships.

COAL REMINING

PROBLEM:

The EPA's present effluent limit regulations for coal mining operations provide a great disincentive to the remining of many areas where mining was previously performed without reclamation, i.e., abandoned mine lands (AML's). These regulations assign interim and permanent liability (to meet water effluent standards) to the current mining operation for all pre-existing discharges encountered when entering a previously mined area. Treatment is not only a great financial expense to the operator, but in many instances a technological impossibility as a result of pre-existing mine discharges of effluents far in excess of the current standards.

SOLUTION:

A modification needs to be made to Section 301 of the Federal Water Pollution Control Act to provide for an exception from the effluent limits for remining in favor of a policy of non-degradation and potential for improvement of the water quality present at the time of the initiation of remining. The area a coal operator chooses to remine would be subject to the full range of environmental performance standards contained in the Surface Mining Control and Reclamation Act of 1977 (SMCRA) for all aspects except water quality. Operators would be required to provide an abatement program in the reclamation plan which would result in a reduction of the mass loadings of pollutants from the pre-remining pollution load and would provide for overall enhancement of other health, safety, and environmental parameters as regulated under SMCRA.

BACKGROUND:

At the time of passage of the Surface Mining Control and Reclamation Act (SMCRA) an estimated 1.5 million acres of land had been disturbed by coal mining, and over 11,5000 miles of streams polluted by sediment or acidity from surface or underground mines. The Abandoned Mine Land fund (AML), authorized under SMCRA, established a tax levied on coal operators to fund reclamation of these areas. Fee collection began in 1978 and will extend through 1992 yielding approximately $3 billion. The problem however is that reclamation of 100% of the coal related AML's has been estimated to require between 12 and 30 billion constant 1983 dollars. From these projections it is clear to see that the AML fund will only generate the monies necessary to rehabilitate 10 to 20% of the affected lands. Given this condition and the present effluent limits applicable to remining operations, the remaining majority will either continue in perpetuity to degrade the environment or necessitate funding for cleanup from the Federal Government's general revenues or additional taxes on the coal industry.

This situation need not be so drastic. Estimates indicate that approximately 40 - 45% of these lands contain additional recoverable reserves that today can be mined with economic benefits if a limited exclusion from the applicability of effluent limitations is enacted.

An amendment incorporating the provisions we have suggested would ensure that significant reclamation would be performed at no expense to the taxpayers, and would positively enhance the quality of existing effluents coming from the sites. It would subject such operations to all other environmental and safety standards of SMCRA. Equally as important, yet often overlooked, is the fact that this provision will provide an increased reserve base which will ensure future employment and a continuing tax base in traditional mining areas. This is particularly important given the increasing scarcity of virgin lands in many established mining communities. It is doubtful that many previously mined areas will be mined and reclaimed unless a constructive remining amendment is enacted.

As a consequence, discharges from those sites will continue to adversely impact the environment. Enactment of the proposed solution will encourage the remining of those sites and result in an environmentally improved area.

pH Effluent Limitation

PROBLEM:

For the coal mining industry the Administrator of EPA has assigned a pH effluent limit for Best Available Technology (BAT) and new sources between 6 and 9. This range however is unnatural and can be environmentally harmful, due to its bias toward alkaline conditions. Under these current regulations, the mining industry spends millions of dollars treating natural rainwater, groundwater and surface waters, to pH levels which are adverse to nature and natural ecosystems.

SOLUTION:

If pH is to be controlled it must be flexible enough to reflect natural conditions. This may be achieved either by reducing the lower limit of the pH range to 5, thereby more closely approximating natural rainwater conditions, or by adjusting the pH effluent limitations on a site specific basis.

This latter alternative can be accomplished by amending Section 301 of the Federal Water Pollution Control Act by adding at the end thereof the following:

> "The Administrator, with the concurrence of the state, may issue a permit under section 402 of this Act which modifies any of the requirements of this Act with respect to effluent limitations to the extent such limitations relate to pH from discharges from mining operations, in order to permit any discharge from such operations to have a lower pH than is required by such limitations, if the Administrator determines that the pH naturally occurring in the waters into which such discharges are made is lower than the pH required by such limitations."

BACKGROUND:

In a perfectly "clean" atmosphere the pH of rainwater, atmospheric water droplets in equilibrium with CO_2 in air is 5.6 while pH values of rainwater due to natural sulphur compounds in the atmosphere can be expected to be in a range of 4.5 - 5.6. Moreover atmospheric concentrations of these natural emissions are affected by climatic conditions and data suggests a natural pH range between 4.4 and 5.4. Thus, the mining industry is treating natural rainwater to achieve effluent limits.

In addition to the naturally acid characteristics of rain, most Appalachian streams are naturally acidic as well with a background pH ranging between 4 and 6. The majority of mining operations occur in the headwaters of drainageways. In these areas, especially, the shallow groundwater characteristics, seeps, and streams are low pH naturally. Therefore the effluent limitations on pH as prescribed by EPA compel discharges which are adverse to natural ecosystems. There are several documented cases of water in the acceptable range being discharged into a natural bog or wetland which have resulted in destruction of these delicate systems. This is inconsistant with other provisions of the Clean Water Act which provides for protection of wetlands, and is an unwarranted financial burden on coal operators.

Site specific ranges will insure water quality that is fully compatible with natural background conditions and species as well as protecting the environment in its natural state. This proposal will insure continued existence of naturally acidic systems and eliminate unnecessary treatment. This policy would be environmentally non-damaging, and in most cases would be environmentally enhancing. There are no ecological or biological benefits to treating naturally occuring water to unnatural levels.

NATIONAL AGRICULTURAL CHEMICALS ASSOCIATION
THE MADISON BUILDING
1155 Fifteenth Street, N.W., Washington, D. C. 20005
202 • 296-1585 Cable: NAGRCHEM

Dr. Jack D. Early
President

March 26, 1985

The Honorable John H. Chafee
United States Senate
567 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Chafee:

The National Agricultural Chemicals Association (NACA) requests that their comments be made part of the written record on the Clean Water Act (CWA) hearings to be conducted by the Senate Committee on Environment and Public Works Subcommittee on Environmental Pollution. Specifically, these comments address S.652 which was introduced into the Senate on March 7, 1985.

NACA is a non-profit, trade organization of manufacturers and formulators of pest control products employed in agricultural production. NACA's membership is composed of the companies which produce and sell virtually all of the technical crop protection materials (active ingredients) and a large percentage of the formulated products registered for use in the United States.

S.652 raises particular concern to our membership as a result of Section 8 which amends the CWA to prohibit water quality based waivers from non-conventional pollutants limitations. These waivers are presently authorized under Section 301(g) of the CWA. NACA believes this amendment to be counterproductive, unnecessarily costly, and not in the spirit of the CWA as enacted.

Specifically this belief is based on the following:

1) The variance process is a basic and supportable concept where an applicant is required to demonstrate that the variance being requested will not result in discharge of pollutant quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment. To arbitrarily force technology-based standards on every discharge ignores the fact that differing pollutants exhibit differing levels of toxicity which can and should be accommodated on a case-by-case basis. Certainly Section 307 of the CWA recognizes these differences by setting aside a list of pollutants thought to be so toxic that 301(g) variances are not available. The mechanisms are already defined whereby EPA is directed to add any non-conventional pollutants to this list, where the level of toxicity warrants.

Honorable John H. Chafee
March 26, 1985
Page Two

2) Any variances requested under the present authority of Section 301(g) will not be granted unless the applicant can demonstrate that the proposed discharge of a non-conventional pollutant will not pose an unacceptable risk to human health or the environment. The process necessary for demonstrating variance acceptability is substantial. The U.S. EPA did issue proposed procedures for application for 301(g) variances. (49 CFR 31462, dated August 7, 1984.) These procedures, along with a referenced technical guidance document being drafted by EPA, will provide the protective mechanisms vital to the proper implementation of Section 301(g).

3) If the availability of Section 301(g) variances is eliminated, the regulated industry and the nation will face a significant economic burden without an attendant benefit. Treatment for the sake of treatment alone does not necessarily yield a corresponding upgrade to the utility of the receiving body of water.

In this sense, Section 301(g) should be viewed as a vital part of the balance intended by Congress in the implementation of the Clean Water Act. Technology-based standards will provide the basic system to be utilized for achieving the national goal of maintaining fishable, swimmable water quality. Where these standards are insufficient to achieve the national goal, EPA is authorized to proceed to tighter discharge limits based on the quality of the receiving body of water and/or the toxicity of the discharge. On the other hand, where it can be shown that technology-based standards are more stringent than required to obtain targeted water quality, a mechanism of relief is essential in order to prevent non-productive expenditures of valuable resources. That is the function of Section 301(g) variances.

In summary, NACA encourages you and the cosponsors of S.652 to recognize the importance of and the continuing need for Section 301(g) variances. We therefore request that the 301(g) variance process presently contained in the CWA be left intact. The conditions for variances availability certainly should be the protection of health and the environment and yet allow the necessary flexibility to prevent unnecessary and non-productive cost to the industry and the nation.

Sincerely,

Jack D. Early

JDE:emm
cc: Senate Committee on Environment and Public Works

NATIONAL
ASSOCIATION
OF REGIONAL
COUNCILS
1700 K St., N.W., Washington, D.C. 20006 • Area Code (202) 457-0710

STATEMENT OF
THE NATIONAL ASSOCIATION OF REGIONAL COUNCILS
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ON
S. 53, CLEAN WATER ACT AMENDMENTS OF 1985
&
S. 652, CONSTRUCTION GRANTS TRANSITION ACT

President
ROBERT RADE STONE
PITTSBURGH REGION, PENNSYLVANIA

First Vice President
WILBUR R. DUNK
CONCHO VALLEY REGION

ROLINA

Immediate Past President
CHARLES F. HORN
MIAMI VALLEY, OHIO

Executive Director
RICHARD C. HARTMAN

Mr. Chairman, the National Association of Regional Councils appreciates the opportunity to submit this statement on S. 53, the Clean Water Act Amendments of 1985 and S. 652, the Construction Grants Transition Act of 1985.

Regional councils are areawide organizations of local governments encompassing a metropolitan area or substate region. Their primary purposes are to increase communication, cooperative decision-making and coordination among local governments, and to develop policies and programs to meet mutual problems. Regional councils have been established to deal with areawide problems like environmental quality, transportation, housing and community and economic development. Most of the areawide water quality management planning organizations designated by Governors under section 208 of the Clean Water Act are members of NARC.

Over the years, NARC has developed a guiding principle for local participation in fulfilling national water quality goals. It simply reflects the reality that local governments and their citizens are ultimately responsible for the bulk of the costs necessary to attain federal standards. It is the local taxpayer who must sustain water quality efforts even after the capital costs of the necesssary treatment facilities have been shared among federal, state and local governments. The operational costs to operate these facilities is formidable. Consequently, NARC has always argued that federal policy should reflect this central responsiblity of local governments and provide for a joint partnership arrangement with the states in carrying out these national policies and goals.

During NARC's Federal Briefing conducted in Washington, February 3-6, 1985, our members strongly supported reauthorization of the Clean Water Act. While supporting continuation of the construction grants program because of the differences in financing capacities of local governments, they recognized the possibility that this program might be phased out and replaced with state revolving funds. NARC's Environment and Energy Policy Committee recommended that the following elements be included in any state revolving fund program and Clean Water Act reauthorization:

1) a mandatory planning program modeled on the MPO process authorized by the Federal Aid to Highways Act;

2) greater flexibility in the permitting process and in setting water quality standards; and

3) early local government participation in developing administrative procedures for the revolving loan program and in setting water quality standards.

NARC members also urged EPA to research and develop alternative and innovative treatment processes and endorsed the National Nonpoint Source Policy developed by EPA's Nonpoint Source Task Force.

The provisions in S. 53 and S. 652 come very close to the policies adopted by our members. The additional funding and orderly phase out of the construction grants program under S. 652 is much preferrable to the Administration's proposals and will ease the transition for localities, particularly those in rural and older urban areas. It will also facilitate local planning efforts to meet current and future treatment needs. NARC also supports continuation of the innovative and alternative technology program and believes the extention of permits to 10 years will assist many localities by reducing administrative burdens.

NARC would like to recommend several additions to S. 652 and S. 53 which we feel would recognize the role of local governments and their regional councils under the state revolving fund program and build on federal investments in local/areawide plans developed under sections 208, 205(j) and 303(e) of the Act. We also have recommendations relating to the proposed nonpoint source control program. NARC commends the leadership shown by this Committee in moving this legislation forward and we urge its speedy enactment by Congress and the Administration.

Amendments to the State Revolving Fund Program

NARC recommends that Section 604 (c)(1) of S. 652 be amended by adding the following new subparagraph:

> "(E) assurances that the project(s) to be funded in whole or in part from the revolving fund are consistent with the plans prepared under Sections 205(j), 208 and 303(e) of the Act."

We also recommend Section 604(c) be amended to add a new paragraph (3) as follows:

> "(3) To encourage State and local governments to conduct joint and cooperative planning and coordination processes provided under Sections 205(j), 208 and 303(e) of the Act, subsequent to the transition, in whole or in part, to a revolving fund program, each State, awarded funds under Section 601 or Section 205

> for revolving fund purposes, shall reserve at least 1 percentum of the sums allotted and available to the State for the fiscal year, or $100,000, whichever amount is greater."

NARC recognizes that the revolving fund grant program should be administered by the states. The states exercise the required regulatory authority to establish water quality standards and the accompanying permit program to ensure discharges meet the standards. However, the bulk of the non-federal funds necessary to develop and operate the public treatment facilities to attain federal water quality goals comes from the local level. These funds come from the local tax base or through sewage treatment fees paid by the local users.

Local governments have a substantial stake in how the revolving funds are established and operated. They need and should have assurances that the federal resources provided through the state to assist in meeting our national water pollution goals will be administered through a process open to their participation and where their interests can be effectively represented . The formulation of priorities and allocation of resources under the revolving loan program should be based on the planning framework that is currently provided to allocate the resources of the capital grants program under Title II.

The planning mandates in Sections 208, 205(j) and 303 of the Act should continue to provide the opportunity for local government involvement especially through their joint areawide water quality management planning agencies and councils of governments. Moreover, if a state decides to take advantage of the provision in Section 4 of S652 and uses Title II funds for capitalization grant purposes the percentage of planning and management funds under section 205 should be maintained and calculated on the basis of the Title II allocation used for capitalization purposes as well as any portion of Title II money continued to be used for construction grant purposes.

The Environment and Public Works Committee has always recognized the special interest and needs of local governments in environmental programs that by necessity must be centrally administered by the State but the force of which fall most directly at the local and substate regional levels. The Clean Air Act is a good example of such precedent. Under Sections 121 and 172 enacted in 1977, the Committee required consultation and planning on a joint basis among the local governments and the states (through the designation of a council of governments, agencies comprised of local elected officials) because it was recognized that in those urban areas requiring transportation controls and other local action measures the interest of these local governments was so fundamental that it should be reflected in the federal legislation.

NARC believes a similar situation exists under S. 652. The local government's vital interests are involved. The revolving fund program will have the same effect on local government's interests as the existing construction grant program under Title II, and the planning and coordination requirements currently applicable to Title II should not be diminished in the new funding approach.

Set Asides

NARC does not agree with the Administration's proposals to eliminate most set asides under Title II including those for water quality planning. The purpose of the 205(j) water quality planning set aside was to assist localities in indentifying cost effective and locally acceptable point and nonpoint measures; developing implementation plans; identifying water quality problems; determining which publicly owned treatment works should be built; and for implementation of section 303(e) of theAct. NARC believes these purposes are as valid and important as when they were enacted in 1981. Section 205(j) has been a major funding source for efforts at the local/regional level to address nonpoint pollution which has become the major water quality problem in many areas.

NARC believes the Clean Water Act reauthorization bill should contain provisions which continue assistance under sections 205(g), 205(j) and 106. We also believe that Congress should strengthen the provisions in section 205(j) which give priority in funding to areawide agencies. A survey conducted in 1983 by NARC revealed that while 88 areawide and local water quality management agencies received some funding under the program, the great majority of these funds were retained at the state level. To reassert its intent that local governments and their areawide agencies be real partners in developing solutions to our nation's water quality problems, NARC recommends that the following language be inserted in S. 53.

> Section 203 is amended by adding the following paragraph:
>
> "(c) Section 205(j)(3) of the Federal Water Pollution Control Act is amended by adding at the end thereof the following: "In giving such priority, the State shall allocate at least 50 percent of the amount granted to such State for a fiscal year under this subsection to regional and interstate public comprehensive planning organizations in such State, except in any fiscal year for which the Adminstrator and the Governor of such State determine jointly that allocation of at least 50 percent to such organizations

> will not substantially assist in achieving the goals of this Act."

Nonpoint Source Pollution

NARC strongly supports the provisions of S. 53 which would establish a national program to control nonpoint source pollution. NARC testified during the Committee's hearings on this subject in 1983 and representatives of our Association served on EPA's Nonpoint Source Task Force. (A copy of our testimony is attached.)

The program should build on the work that has already been accomplished through the 208, NURP, RCWP and MIP programs. Areawide water quality management agencies should refine water quality plans, where appropriate, in light of the findings and data developed under these programs. Priority should be given to implementing preventative measures to protect critical and high quality water bodies and abatement measures for those water bodies not meeting standards where NPS is a significant factor. NARC believes that funds should be made available under the revolving loan program in S. 652 where it can be demonstrated that nonpoint control procedures would be a more cost effective strategy than a conventional treatment strategy. Such an approach has been successfully demonstrated at the Dillon Reservior in Colorado under a program developed by the Northest Colorado Councilof Governments. (See attached article)

Because so many of the best management practices involve land use regulation, they cannot be carried out without the active support and cooperation of local government which has traditionally held this responsibility. States should be required to meaningfully involve local governments and areawide agencies in the development of nonpoint source control programs.

NARC recommends that section 112(a)(3) of S. 53 be amended to read:

> "In developing and implementing the management program described in this subsection, a State should, to the maximum extent possible, make use of local agencies or organizations."

Regional councils have developed a high level of expertise about nonpoint problems in their regions through the 208, NURP, and 205(j) programs. NARC believes this resource should be utilized by the states.

NARC appreciates the opportunity to present its views on this legislation and we look forward to working with the Committee in the speedy enactment of legislation to maintain the progress made in cleaning up our nation's waters.

NATIONAL
ASSOCIATION
OF REGIONAL
COUNCILS

1700 K St., N.W., Washington, D.C. 20006 • Area Code (202) 457-0710

STATEMENT OF

AUSTAN S. LIBRACH

Director

Department of Environmental Programs

Metropolitan Washington Council of Governments

ON BEHALF OF THE
NATIONAL ASSOCIATION OF REGIONAL COUNCILS

BEFORE THE

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ON

NONPOINT WATER POLLUTION MANAGEMENT

July 19, 1983
Washington, D.C.

President
ROBERT RADE STONE
PITTSBURGH REGION, PENNSYLVANIA

First Vice President
WILBUR R. DUNK
CONCHO VALLEY REGION, TEXAS

Second Vice President
JONATHAN B. HOWES
RESEARCH TRIANGLE, NORTH CAROLINA

Immediate Past President
CHARLES F. HORN
MIAMI VALLEY, OHIO

Executive Director
RICHARD C. HARTMAN

Mr. Chairman, I am Austan S. Librach, Director, Department of Environmental Programs of the Metropolitan Washington Council of Governments. I appreciate the committee giving me this opportunity to testify on amendments to the Clean Water Act dealing with nonpoint source pollution.

Regional councils are areawide organizations of general purpose local governments encompassing a total regional community. Their primary purposes are to increase communication, cooperative decision-making and coordination among local governments, and to develop policies and programs to meet mutual problems. Regional councils have been established to deal with areawide problems such as environmental quality, housing, community and economic development, transportation and public safety. Regional councils exist today in all the nation's major metropolitan areas, including the 37 interstate ones. The National Association of Regional Councils represents over 350 regional agencies in both rural and metropolitan areas throughout the United States. Most of the designated 208 areawide water quality management planning organizations are members of NARC.

NARC strongly supports the efforts of this committee to address the problem of nonpoint source pollution. We are especially appreciative of Senator Chafee's and Senator Durenberger's leadership on this issue. The impact of nonpoint source pollution is too great to ignore any longer.

When the Clean Water Act was passed by Congress in 1972, the majority of water pollution control experience was with industrial and municipal point source problems. Our understanding of nonpoint source pollution was limited and early attempts to quantify the problem presented a global, almost all pervasive problem. However, through state and areawide nonpoint source efforts under the section 208 and other programs, water quality managers have increased their understanding of the magnitude of the problem and have identified major categories and approximate sizes of nonpoint source loadings in most states. Using techniques developed in the 208, National Urban Runoff and other programs, areawide water quality managers are now able to more realistically identify those cases where nonpoint source pollution is having a significant effect on water quality and propose workable solutions.

From a national perspective, the 1982 state water quality assessments (305(b)) show that in one-fifth of the states, nonpoint source pollution is now the most important cause of water degradation in those waters not meeting uses. Agricultural nonpoint source pollution is the major source of nutrients in U.S. lakes with euthrophication problems. EPA reports that of those states (20) that have quantified their progress towards meeting the 1983 Clean Water Act goals, three-quarters (15) list nonpoint pollution as a significant source in their remaining problem waters. From my own experience centering on the Potomac and the Chesapeake Bay, we know that approximately 67 percent of the total nitrogen load and 39 percent of the phosphorus delivered to the Bay originates from nonpoint sources.

The Clean Water Act establishes a focus and rational decision-making process for the consideration of nonpoint source issues. States and local governments through their regional councils develop water quality management plans which describe both point and nonpoint sources of pollution, assist state and local officials in development of pollution control programs and provide a framework for managing water quality information on a continuing basis. Regional councils have been intimately involved in this process under the section 208 and 205(j) water quality management planning programs. Through EPA's farsighted sponsorship of the National Urban Runoff Program (NURP), regional councils (many of which were demonstration participants) have verified best management practices (BMP) and gained valuable operation experience.

In carrying out their responsibilities under the Clean Water Act, regional councils have developed water quality management plans, technical and administrative skills (that include the ability to identify and quantify nonpoint source problems and work within management systems that will implement best management practices) and management systems that are responsible for implementing plan recommendations. They have served as clearinghouses and coordinators for all (or a variety of) water related activities within their regions. Councils serve as key links in the nonpoint source management networks that include state water pollution control agencies, local governments, soil conservation districts, university technicians, U.S. EPA, USDA and other government and private agencies.

More than anything the identification and solution of nonpoint source problems is an intergovernmental process. Most best management practices involve land use regulation. They cannot be carried out without the active support and cooperation of local government which has traditionally held this responsibility. Regional councils have had much success in mobilizing local governments and resources to address the nonpoint source problem. They have been able to link water quality concerns with traditional local interests like stormwater control, zoning and municipal development. Regional councils have assisted their member local governments in drafting preventative ordinances and effectively involved affected community groups in the development of nonpoint management programs.

In the Washington, D.C. metropolitan area, areawide water resource planning has been partially funded for the last three years by local contributions to a special "Regional Fund". The Fund was instituted in 1980 by local governments represented on the Washington Metropolitan Water Resources Planning Board and is organized around a budget allocation formula which assesses each member government a proportional share of the planning budget adopted annually by the Board. The formula sets each local government's contribution according to its proportional share of the total metropolitan population. The four most populous counties in the region together contribute approximately 80 percent of the annual Regional Fund request.

The Fund supports four general work elements in the annual water resource work program developed by the region's Water Board. These are:

1. Resource Analysis - evaluation of environmental impacts associated with regional and local decisions and practices;
2. Trend Analysis and Policy Development - developing regionally consistent projections and reports on resource trends and needs to aid local and regional policy-makers.
3. Policy Implementation - technical assistance to specific public works facility planning and construction studies; and
4. Coordination of Resource Monitoring - direct field data collection and liaison services to coordinate regional water quality monitoring.

In the last three years, the Fund's support to the total areawide water resources planning budget has increased from about 15 percent in FY '82, to about 46 percent of the total budget in FY '84.

The Regional Fund was conceived by area local officials to maintain a viable regional water resource planning program in the face of cutbacks in EPA funding for these programs. It also reflects the growing interest of Washington area local officials in redirecting the areawide planning program to meet the needs of local planning programs and treatment facility operation and management decisions.

While appropriate consideration of abatement and control of pollution from nonpoint sources throughout the water quality management process is required by the Clean Water Act and existing EPA regulations, NARC feels nonpoint source problems have not received the attention they deserve. This has occurred for a number of reasons.

EPA has not placed enough emphasis on nonpoint source pollution as a problem of national concern. While it is understandable that the agency would try to concentrate its efforts on the more obvious point sources in the early years of the clean water program, there has not been a strong institutional focus of nonpoint issues within EPA. Termination of funding for areawide managment planning under section 208 has, in NARC's view, further accentuated the perception that nonpoint source problems were not considered a high priority by EPA.

Most states have downplayed the nonpoint source problem since no money is available under the construction grants program to address it and they know they still have to manage the point source problem anyway. The definition of nonpoint source problems is an exacting science and many states have choosen to focus on point sources where the funding (construction grants) and implementation program (NPDES) is well defined. This can be illustrated by an analysis of grants made under the recently enacted section 205(j) water quality management planning program. NARC, in an informal survey, found that most of the funding was being used to support state level construction grant activities. Even in those cases where funds have been passed through to areawide water quality management agencies the focus of much of the work program is on activities that support construction grants. EPA did not make any discernable effort to direct at least a portion of these funds to nonpoint source activities.

Finally, funding for implementation of nonpoint source control programs has fallen largely to local governments. In this period of difficult fiscal constraints, local officials must weigh the benefits of nonpoint management programs against the benefits of all other services they must provide. It is difficult to justify initiating or maintaining a nonpoint management program when local officials cannot make a compensating reduction in their expenditures for treatment facilities or operations. The Clean Water Act presently does not allow any reduction in pollutant loadings caused by implementation of nonpoint source management practices to be credited toward meeting point source loading requirements. The lack of such incentives weighs the decision-making process toward initiation of construction grant type solutions where assistance is available.

In order for nonpoint source problems to be solved, NARC believes a number of steps should be taken. EPA must give higher priority to nonpoint sources problems and urge the states and local governments to do the same. Recently, NARC participated in a meeting convened by Acting Administrator for Water, Rebecca Hanmer to discuss how EPA can improve its effectiveness in this area. This is a good start and NARC is currently putting together a list of suggested changes that EPA could make in its regulations and policies to give greater emphasis to nonpoint source issues. Further, we must continue to identify and refine our understanding of nonpoint source problems, including a re-examination of data and recommendations developed in 208 plans in light of findings from the National Urban Runoff, Great Lakes International Surveillance Plan, Chesapeake Bay, Rural Clean Water and Model Implementation programs.

Nonpoint source problems tend to be site specific in terms of the types of pollutants and best management practices that are most effective. These can best be determined at the local level through existing areawide water quality management agencies. NARC does not believe massive new nonpoint source assessments must be made but there is a need to initiate or continue "implementation planning" which will give life to adopted water quality management plans.

Implementation planning would be characterized by the following activities:

1) Assumes the problem has been identified.

2) Assumes the BMP(s) have been identified.

3) Identifies the agency (ies) proposed to be responsible for implementing control measures.

4) Identifies all legislation and rules which affect agencies activities as well as those that are related to the pollution problem and BMPs.

5) Examines current agency practices which are or may be related to BMP implementation.

6) Identifies benefits (water quality and others) which will accrue to the community if BMP is implemented.

7) Identifies incremental costs to the agency, to the private sector, to consumers, to the public for various levels of implementation.

8) Examines and identifies potential revenue sources to defray incremental costs.

9) Describes and encourages needed changes in agency practices for BMP implementation.

10) Identifies and encourages needed changes in legislation and rules.

11) Suggests funding mechanism.

12) Works with affected public officials, agency personnel and the public throughout the process.

13) Fully documents all data, findings and recommendations.

14) Institutes and maintains education program.

Much of this activity relates to the intergovernmental process, I referred to earlier. Recent evaluations of the Model Implementation Program noted that future nonpoint source programs should provide sufficient opportunities for implementation planning and mechanisms must be established to transfer state of the art technology to projects and ensure that it is appropriately utilized. Finally, NARC believes federal and state funds should be made available to supplement local resources.

NARC supports the general thrust of the Durenberger amendment. However, we recommend several changes that we feel will assure better implementation of the nonpoint management program. NARC is concerned about the length of time given to states to implement an NPS program. While nine months is too short, four years may be too long and provide opportunities for unreasonable delay. We think the problem is urgent enough that states should be required to start implementation within two years. NARC also believes that states and localities need more positive incentives to address nonpoint source problems.

We recognize that current federal budget realities will not permit an authorization larger than the one in this bill. However, all incentives need not be monetary. As I mentioned previously, a major assist would be to allow any reduction in pollutant loadings through the use of nonpoint management practices to be credited toward meeting point source loading requirements. NARC feels such an incentive is applicable in many areas and could save expenditures under the construction grants program. The Durenberger amendment places significant reliance on the imposition of sanctions to achieve compliance. However, our experience with the clean air program shows their limitations and the threat of sanctions could broaden opposition to a nonpoint source management program.

A necessary prerequisite to NARC's incentive proposal is the establishment of a monitoring system under the state's implementation plan that is capable of measuring the reduction of pollutant loadings resulting from nonpoint source management practices. NARC is confident that such monitoring systems are technically feasible and reliable. Further, we would strengthen provisions in the Durenberger amendment calling for participation of areawide water quality management agencies in developing and implementing the nonpoint management program by adding the phrase, "to the maximum degree practical". Regional councils participating in the section 208, NURP and section 205(j) programs have a high degree of expertise about the water quality problems in their regions and it should be utilized. The nonpoint management program must be a cooperative process, each level of government has a vital role to play.

NARC would also modify the provision in the Durenberger amendment calling for the Administrator to impose a management program if a state fails to submit one. We are not sure that EPA has the staff available to implement this provision and even if it does, recent Supreme Court decisions would not require the state to accept responsibility for operation of the program. NARC proposes to allow an adjacent state to petition the EPA Administrator to make a determination whether the failure to develop and implement a nonpoint source management program had an adverse impact on the petitioning state's efforts to attain national water quality goals. If the determination is affirmative, the Administrator could order the offending state to develop and implement a nonpoint source management program. Failure to comply would allow the petitioning state to bring a civil action. We feel this proposal leaves the responsibility where it belongs, at the state level, and provides an opportunity for states to negotiate their differences.

We have attached a copy of our proposals to this testimony. NARC feels the enactment of a national nonpoint source management program would be a positive step in addressing this important water quality issue. We urge the committee to include such a provision in the final version of S. 431. NARC appreciates the opportunity to testify before this distinguished committee and I will be pleased to try and answer any questions that you may have.

Thank you.

SEC. II. (a) Title ___ of the Clean Water Act is amended by adding at the end thereof the following new section:

NONPOINT SOURCE POLLUTION MANAGEMENT PROGRAM

SEC. ___. (a) On the application of the Governor, the Administrator is authorized to make a grant for the purpose of implementing a management program to control nonpoint sources of pollution to improve water quality in the State for which the Administrator, after consultation with appropriate Federal agencies, has approved a program under subsection (b) of this section. Payments for such purpose may be made to the States as hereinafter provided in subsections (d) and (e), subject to such terms and conditions as the Administrator considers appropriate.

(b)(1) A State or combination of States shall be eligible for assistance under this section by submitting to the Administrator, within 24 months after the date of enactment of the Clean Water Act Amendments of 1983, a nonpoint source management program which shall, on the basis of available information, including but not limited to information available under sections 208, 303(e), 304(f), or 305(b) of this Act:

(A) identify those waters within its boundaries which without additional action to control nonpoint sources of pollution cannot reasonably be expected to attain or maintain State water quality standards approved by the Administrator under the provisions of section 303(e) of the Act or that water quality which shall assure protection of public health, public water supples, agricultural and industrial uses, and the protection and propagation of a balanced indigenous population of snelfish, fish, wildlife and plants and allow recretional activities in and on the water;

(B) designate categories or subcategories of nonpoint sources of pollutants that contribute significant pollutant loadings to the waters identified under subsection (b) (1) (A) of this section;

(C) identify management practices and measures which will be undertaken (including land use requriements) to control each category or subcategory of such nonpoint sources and to reduce to the greatest extent practicable pollutant loadings resulting from such nonpoint sources; and

(D) include a proposed implementation plan which shall include:

(i) a description of proposed management practices and measures which the State or combination of States commits to implement within a specified time period to reduce pollutant loadings resulting from nonpoint sources;

(ii) the estimated cost of the management practices and measures proposed to be implemented during the period of any grant made under this section;

(iii) an identification of methods (including, as appropriate, programs for enforcement, technical assistance, and cost-sharing) for implementing those proposed management practices and measures scheduled for implementation during the period of the grant; and

(iv) a statement from the attorney general of such State or States (or the attorney for those State water pollution control agencies which have independent legal counsel) that the laws of such State or States, as the case may be, provide adequate authority to carry out the described program scheduled for implementation during the grant period annd a commitment to seek the necessary legal authority for proposed management practices and measures scheduled for implementation in the future;

(v) a monitoring system that is capable of measuring the reduction of pollutant loadings resulting from the nonpoint source management practices and measures implemented by the State.

(E) in identifying management practices and measures that involve land use and developmental policies and practices and in implementing the implementation plan described in subparagraph (D) of this paragraph a State, to the maximum degree practical, shall provide for the participation of local governments and regional organizations participating in water quality management planning under sections 205(j) or 208 of the Act.

(2) Each program submitted in accordance with paragraph (1) of this subsection shall be deemed to have been approved by the Administrator unless, within 6 months after the date of receipt of such program, he determines after notice and opportunity for public comment and consultation with appropriate Federal, State, regional agencies and local governments and other interested persons that adequate authority does not exist to carry out the described program or that the program is otherwise insufficient to substantially control nonpoint sources of pollution and to reduce pollutant loadings resulting from such nonpoint sources. If the Administrator so determines, he shall notify the State of any revisions or modifications necessary to obtain approval. The State shall thereupon have an additional 3 months to submit its revised implementation plan.

(c) Any reduction in pollutant loadings caused by the implementation of a nonpoint source management program under this section and identified by a State through its monitoring activities in subsection (b)(D)(v) which are verified by the Administrator may be credited by such State toward meeting point source loading requirements for those waters where the nonpoint source measures and practices are implemented.

(d) Upon the petition of an adjacent downstream State which is implementing a nonpoint source management program approved by the Administrator under this section, he shall determine whether the failure of the upstream State to develop and implement a nonpoint source program under this section, at least at the level and magnitude of the petitioning State, is adversely affecting the petitioners attaining national water quality goals. If there is a finding of adverse affect, the Administrator shall order such State to develop and implement a nonpoint source plan that is compatible with the petitioning State. Failure to take steps to comply with such order within 180 days and upon the verification of this fact by the Administrator, the petitioning State may bring a civil action for such violation of the Administrator's order. If it is determined that the State has willfully violated such an order, such State shall be subject to a civil penalty not to exceed $10,000 per day during such violation. An action under this subsection shall be brought in the Circuit Court of Appeals of the United States for the District of Columbia.

(e)(1) Upon approval of a nonpoint source management program submitted in accordance with subsection (b)(1) of this section, the Administrator shall finance the costs of implementing such program up to the amount apportioned under subsection (e)(2) except that Federal grants under this section shall not exceed 50 per centum of the costs of implementing the program in any fiscal year and shall be made on condition that non-Federal sources provide the remainder of the costs of implementing the program during the period of such grant.

(2) Administrative costs in the form of salaries, overhead or indirect costs for services provided and charged against programs or projects supported by funds made available under this section shall not exceed 10 per centum of the annual Federal grant made to a State under this section.

(e)(1) For the purpose of this section there is authorized to be appropriated, to remain available until expended, $150,000,000 per fiscal year for the fiscal years ending September 30, 1983, September 30, 1984, September 30, 1985, September 30, 1986, and September 30, 1987.

(2) Sums available for the purpose of this section shall be apportioned among the States by the Administrator, whose determination shall be final, on the basis of the ratio which the total of shoreline miles of streams, reservoirs, lakes, bays and estuaries of each State bears to the total of

shoreline miles so identified by the several States. Such apportionments shall be adjusted equitably so that no less one-half of 1 per centum of the total amount apportioned shall be allocated to each State.

(f) Section 304 of the Clean Water Act is amended by adding at the end thereof the following new subsection:

(1) For the purpose of assisting States in carrying out programs under section ___ of this Act, the Administrator shall establish and maintain in the Environmental Protection Agency an Office, Division of Branch of Nonpoint Source Pollution Management Programs to:

(1) receive and process nonpoint source management programs under section ___ of this Act; and

(2) collect and make available, through publications and other appropriate means, (A) the results of monitoring activities under section (d)(3) of this Act, and (B) other information pertaining to management practices and measures which can be undertaken (including land use requirements) to control categories of nonpoint sources of pollution and to reduce pollutant loadings resulting from such nonpoint sources, including but not limited to (i) information concerning the costs and relative efficiencies of best managment practices and best available techniques for reducing nonpoint source pollution; and (ii) available data concerning the relationship between water quality and implementation of various management practices and measures to control nonpoint sources of pollution.

socma SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION, INC.
1612 K STREET, N.W., SUITE 308, WASHINGTON, DC 20006 • (202) 659-0060

STATEMENT OF THE
SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION
SUBMITTED TO THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
WITH RESPECT TO REAUTHORIZATION OF THE CLEAN WATER ACT

April 3, 1985

STATEMENT OF THE
SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION

SUBMITTED TO THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WITH RESPECT TO REAUTHORIZATION
OF THE CLEAN WATER ACT

April 3, 1985

The Synthetic Organic Chemical Manufacturers Association (SOCMA) appreciates this opportunity to comment on the reauthorization of the Clean Water Act. SOCMA is a non-profit trade association of approximately 100 manufacturers of organic chemicals. SOCMA's member firms produce over 5,000 distinct chemical products used primarily in industrial applications. Over 50 percent of SOCMA's members are considered to be small businesses with annual organic chemical sales below $50 million.

In this statement, SOCMA addresses five points:

- Administratively Imposed Civil Penalties. SOCMA does not believe that granting EPA authority to impose administrative civil penalties is necessary for effective enforcement of the Clean Water Act. However, should the Subcommittee adopt such a provision, a discharger should be accorded the procedural rights of the Administrative Procedure Act and should not be subject to a citizens suit for the same asserted violations.

- Criminal Provisions. Any modification of the criminal penalty provisions of the Act should be directed toward clear and serious violations of standards or permit requirements established under the Act.

- Permit Life. SOCMA supports extension of the duration of NPDES permits from five to ten years provided that such permits are not subject to a broad reopener clause.

- Compliance Deadlines. The existing statutory deadlines for compliance with BAT and BCT should be revised to require compliance within three years and six months from the promulgation of applicable effluent limitations guidelines.

- Pretreatment Programs. The Act should be amended to provide an alternative local pretreatment program option to the application of national categorical pretreatment standards.

Administratively Imposed Penalties

S. 53 would allow EPA to impose administrative penalties for violation of the Clean Water Act. SOCMA does not believe that there is a need for administrative penalties. Current EPA authority to issue administrative orders and to seek judicially imposed civil penalties is adequate for effective enforcement of the Act. The threat of administrative penalties for minor violations or in circumstances where it is unclear as to whether there was a violation raises a significant issue of fairness.

However, if the Subcommittee decides to grant such authority to EPA, SOCMA recommends the following:

(1) Such penalties should be imposed only for clear violations of objective standards or limitations adopted under the Act.

(2) The procedural safeguards of the Administrative Procedure Act should be available, including the right to a hearing before an impartial administrative law judge and a right of evidentiary discovery.

(3) Criteria should be established for penalty assessments, including the size of the facility.

(4) A discharger should not be subject to a citizens suit regarding violations to which EPA has initiated a civil penalty proceeding.

Criminal Penalties

S. 53 would enlarge criminal sanctions for violation of the Act. Of particular concern to SOCMA is the fact that the bill would make it a criminal violation to discharge negligently or knowingly to a POTW pollutants which cause or may be reasonably anticipated to cause personal injury or property damage or cause the POTW to violate its discharge permit. SOCMA also is concerned about the broad authorization of criminal sanctions for a violation of "any requirement imposed in a pretreatment program approved under Section 402(b)(8)."

SOCMA believes that such vague and sweeping provisions are neither appropriate nor necessary. SOCMA can understand the Subcommittee's desire to provide severe sanctions for "midnight dumpers" whose illicit activities can impair treatment processes and pose a threat to human health or the environment. SOCMA urges that any revision of the criminal provision of the Act focus on such clear and substantial violations.

Permit Life

SOCMA supports the extension of the maximum duration of NPDES permits from five to ten years. Such a provision would provide more certainty for those subject to permits and reduce the regulatory burden on both permittees and state and federal permit-issuing agencies.

The value of extended permit life, however, would be substantially undercut by a reopener clause of the type contained in S. 53. In SOCMA's view, the existing statutory authority to reopen a permit upon promulgation of toxic effluent standards under Section 307(a) and EPA's regulatory authority to modify a permit on the basis of new information or changed conditions (not including new or modified regulations) define the proper bases for reopening or modifying a permit.

Compliance Deadlines

Modification of the July 1, 1984, deadline for compliance with effluent limitations based on BAT or BCT is necessary. EPA has not yet issued effluent limitations guidelines for all industry categories -- for example, EPA's present schedule calls for promulgation in 1986 of guidelines for the organic chemicals and plastics and synthetic fibers industry.

Review of the Act's deadlines should take into consideration both the time required to issue permits based upon the guidelines and the time required to design and install equipment needed to achieve BAT or BCT limitations. SOCMA recommends that the deadlines be linked to the issuance of applicable regulations and that three years and six months be allowed for compliance from the date of promulgation of BAT or BCT regulations. A similar time for compliance with revised BPT requirements also should be allowed if revised BPT effluent limitations guidelines require a level of control substantially greater or are based on significantly different technology than the BPT limits presently contained in an NPDES permit.

Alternative Local Pretreatment Systems

SOCMA believes that the Clean Water Act should be amended to provide an option to the application of national categorical pretreatment standards to industrial users of individual POTWs. A program for alternative local pretreatment systems would provide needed flexibility with respect to pretreatment controls.

Many municipalities already have developed effective local pretreatment programs. SOCMA believes that such programs have substantially implemented the objectives of the Clean Water Act in that they protect POTW operations, ensure compliance with POTW NPDES permit limitations, and ensure safe sludge disposal.

Local programs also allow cost-effective treatment of both industrial and municipal waste. In contrast, reliance solely on the technology-based national categorical pretreatment standards can lead to unnecessary and redundant treatment since, in promulgating the national regulations, EPA has not sufficiently accounted for the degree to which a POTW can remove pollutants.

Ronald A. Lang
Executive Director

STATEMENT OF THE UNITED STATES BREWERS ASSOCIATION, INC.
ON AMENDMENTS TO THE CLEAN WATER ACT

TO THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

March, 1985

United States Brewers Association, Inc.
1750 K Street, N. W.
Washington, D. C. 20006

The United States Brewers Association, Inc. (USBA) appreciates this opportunity to present its views on the reauthorization of the Clean Water Act.

At the outset, we wish to emphasize USBA's full support for the goals of the Act and its belief that only minor adjustments are necessary to promote the attainment of its objectives. Briefly, we wish to offer our views on the following issues: (1) BAT/BCT compliance deadlines; (2) NPDES permit life extension; (3) *de minimus* discharges; (4) pretreatment of conventional pollutants; and (5) criminal penalties.

BAT/BCT Compliance Deadlines

Due to delays by EPA in promulgating effluent limitations guidelines, industry is unable to meet the July 1, 1984, compliance deadline for meeting BAT and BCT limitations contained in Section 301 of the Clean Water Act. USBA concurs, therefore, with the intent of Section 104 of S. 53 which recognizes the reality of the situation by extending compliance deadlines for meeting BAT and BCT limitations to three years after promulgation of an effluent guideline. We respectfully suggest, however, that the reference to a date certain ("but in no case later than July 1, 1987") be deleted. Industry obviously requires a reasonable lead time in which to design, order and install treatment facilities to come into compliance with the applicable guidelines, and three years generally is recognized as a realistic time period for completion of this activity. USBA recognizes that Congress intends to encourage EPA to fulfill its mandate in a timely manner by specifying a date certain for compliance in the Act; but, the real effect of this provision is to penalize industry, which, after all, cannot force EPA to promulgate guidelines.

The brewing industry is an example of an industry which will stand in technical violation of the law if Section 104 is passed in its current form. The NRDC Consent Decree caused EPA to accord priority to the promulgation of effluent guidelines for industries discharging toxic pollutants. Since brewing wastewater contains only conventional pollutants such as BOD and suspended solids, EPA has yet to promulgate a final effluent guideline. Indeed, EPA has not yet issued even a proposed rule, nor do we anticipate such action in 1985. Even presuming that EPA is able to propose and promulgate a rule in 1986, the brewing industry will be faced with coming into compliance with its guidelines in what may very well be less than one year's lead time.

While USBA does not anticipate that enforcement action will be taken against those brewers which fail to meet the unrealistic July 1, 1987, deadline imposed by Section 104, the industry which we represent is anxious to comply with both the letter and the spirit of the law. If Section 104 of S. 53 is enacted without amendment, however, the brewing industry will be in the uncomfortable position of violating an important provision of the Act due to events clearly beyond its control. USBA, therefore, requests that this Subcommittee amend Section 104 to reflect the reality of the situation faced by the brewing industry.

NPDES Permit Life Extension

The National Pollutant Discharge Elimination System (NPDES) is perhaps the most complex of all Clean Water Act programs in terms of the volume of administrative reforms, rulemaking actions and judicial decisions affecting its implementation. These factors have combined to create seemingly ever-moving targets which make the maximum five-year life for NPDES permits provided in Section 402(b)(1)(B) of the Act unduly burdensome on the staff resources of regulatory agencies. The five-year limit also is insufficient from industry's perspective, in that it does not provide assurance that once the considerable funds necessary to install pollution control equipment are committed, the investment will have some useful life. USBA, therefore, strongly supports Section 110(a) of S. 53 which would extend NPDES permit life to 10 years, except for permits which contain waivers or other modifications.

USBA is deeply concerned, however, that the mandatory reopener clauses contained in Section 110(b) of S. 53 could create chaos in the NPDES permit process and, most certainly, would negate any benefits to be derived from the 10-year permit contemplated by Section 110(a).

We would, for instance, point to EPA's final regulation of storm water point sources, promulgated on September 26, 1984. This rule broadened the scope of sources requiring NPDES permits to cover not only uncontaminated industry outfalls, but also outfalls from private residences in urbanized areas, "Mom and Pop" grocery stores and church parking lots. The number of new NPDES permits required by this rule is almost impossible to estimate, but must run into the hundreds of thousands. The backlog in the NPDES permit process which prompted consideration of a 10-year permit life surely will be vastly increased if Congress now *requires* EPA to reopen each of these new permits *every time*, for example, a new water quality standard is issued.

USBA recommends that this Subcommittee reject the concept of statutorily mandated reopener clauses and instead affirm EPA's discretionary authority in this area.

De Minimus Discharge Exemptions

EPA's promulgation of storm water point source regulations, mentioned above, calls into question the desirability of amending Sections 402 and 502(12) of the Clean Water Act to exempt *de minimus* discharges of pollutants from NPDES permit requirements.

As currently constituted, the Act requires that an NPDES permit be obtained even if a discharge is small and contains only minute quantities of benign pollutants. This requirement is significantly more stringent than that found in other environmental statutes such as the Clean Air Act which contains provisions limiting the regulation of sources to those emitting pollutants in excess of a threshhold level.

USBA concedes that sufficient data do not now exist to argue for a blanket exemption for *de minimus* discharges, but would suggest that the Subcommittee consider adoption of a provision, similar to Section 36 of H.R. 8 as introduced by Representative Howard, Chairman of the House Public Works and Transportation Committee.

Section 36 requires EPA to conduct a one-year study on the feasibility and desirability of eliminating the regulation of de minimus discharges. Once completed, Congress will be able to determine whether the regulation of all de minimus discharges as point sources produces any significant environmental benefit or merely diverts government and industry resources from addressing more serious water quality problems.

Because USBA feels strongly that neither the EPA nor the states have sufficient resources to implement the final regulation of storm water point sources, we would also suggest that the Subcommittee give serious consideration to placing a moratorium on the permit requirement for these sources until such time as EPA submits its study and Congress considers whether any legislative changes are warranted by its findings.

Pretreatment of Conventional Pollutants

USBA strongly supports Section 107 of S. 53 which would enjoin EPA from requiring pretreatment of conventional pollutants by indirect dischargers in cases where a municipal treatment works is not able to meet its permit requirements because of operational, mechanical or design failures.

This section will serve to statutorily confirm Congressional intent with regard to the pretreatment of compatible wastes as contained in the House/Senate Report on the 1972 Act:

> Pretreatment of biological waste that is compatible with the treatment provided by a publicly-owned waste treatment plant into which such waste is introduced may not be necessary. Examples of such biological waste may be the normal effluent of a brewery

> and of food processing plants where the composition and proportion of such effluent is compatible with the municipal waste treatment system. In no event is it intended that pretreatment facilities be required for compatible wastes as a substitute for adequate municipal waste treatment works. [Emphasis added.] (Leg. History; 1972 FWPCA; Vol. 1, Page 313.)

The authors of the landmark legislation encouraged the construction and operation of municipal waste treatment systems which would handle both household and industrial wastes, provided that the wastes were compatible and did not contain toxic substances. They correctly recognized that having every industry treat its own wastes would divert needed resources, increase energy consumption and proliferate sludge disposal problems.

Despite these clear expressions by Congress, EPA has, in many instances, resorted to "quick-fix" solutions in cities with inadequately designed or poorly operated POTWs by encouraging pretreatment of conventional pollutants rather than the correction of the POTW's deficiencies. This policy, in turn, has produced the very duplicative, cost-ineffective results which the authors of the 1972 Act sought to prevent.

Both Houses of Congress considered provisions similar to Section 107 last year. Near the end of their deliberations an unwarranted controversy developed over the effect of the legislation. In order to forestall the repetition of that situation, USBA believes it is important to note that Section 107 would not: (1) remove EPA's authority over the regulation of toxic pollutants; (2) relieve industry of its obligations to comply with all applicable Federal, state and local requirements; (3) relieve municipal treatment systems of their permit compliance obligations; or (4) prevent or inhibit local sewage treatment authorities from ordering any actions they deem necessary to ensure compliance with their permit limitations. Section 107 of S. 53 merely provides a much needed reminder that Congress did not intend to require the pretreatment of compatible pollutants that can be handled by a well-designed and operated POTW, and puts the resolution of any local problems with conventional pollutants where it belongs -- in local hands.

Civil and Criminal Penalties

USBA takes no overall position on the "Civil and Criminal Penalties" section of S. 53, but wishes to express its deep concern over the possible application of criminal sanctions against indirect dischargers that comply with all applicable Federal, state and local requirements.

Our particular problem stems from one possible interpretation of the language in Section 108(d) which mandates the imposition of fines and imprisonment on any person who:

> knowingly introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which causes or may reasonably be anticipated to cause personal injury or property damage, or causes such treatment works to violate any effluent limitation or condition in any permit issued to the treatment works under Section 402 of this Act . . ..

Liability under Section 108(d) is essentially triggered by three conditions: (1) that a pollutant or hazardous substance be introduced into a publicly owned treatment works (POTW); (2) that the introduction of the pollutant or hazardous substance be done knowingly; and (3) that the discharge cause personal injury, property damage or a POTW permit violation.

Virtually all industrial customers of POTWs meet the first two conditions for liability on the day they begin discharging their wastewater to the system for treatment. Section 402(8) of the Clean Water Act requires the industrial customer to know the quantity and quality of pollutants in his discharge, provide the POTW with the information and to notify the POTW of any anticipated changes. Industrial customers are thus always knowingly introducing pollutants into a POTW. Indeed, they pay handsome user charges to the POTW for the privilege.

To this point, the industrial customer has done nothing illegal, but the third condition may make the step from customer to criminal a short one. Put simply, a POTW cannot possibly violate a permit limitation in the absence of discharges of pollutants to the system. Thus, even discharges in compliance with all applicable Federal, state and local requirements can be said to have caused a POTW to violate a permit limitation, and trigger prosecution under the amendment to Section 309(c) of the Act.

USBA does not believe that Congress intends to impose criminal liability on indirect dischargers who obey the law. In order to prevent such a clearly unjust application of the sanctions contained in Section 108(d) of S. 53, therefore, we urgently request adoption of a provision which would provide an affirmative defense that the introduction of any pollutant or hazardous substance into a sewer system or treatment works was in compliance with all Federal, state and local requirements governing the introduction.

USBA is a not-for-profit trade association of malt beverage producers and suppliers to the brewing industry, whose brewer members account for over two-thirds of total U.S. malt beverage production. USBA's member companies employ almost 32,000 persons directly, and over 500,000 people in the United States are involved in beer production and distribution and other related industries. Overall, malt beverage production in the United States is a $12.2 billion industry. The American brewing industry contributed $2.7 billion in local, state and Federal excise taxes in 1984.

Washington Environmental Coordinating Committee

March 26, 1985

The Honorable John Chafee
Chairman
Environmental Pollution Subcommittee
Senate Environment and Public Works Committee
408 Hart Senate Office Building
Washington, D. C. 20510

Dear Chairman Chafee:

The Washington Environmental Coordinating Committee (WECC) is an informal coalition made up of representatives of industry associations and major corporations. WECC meets on an as-needed basis to exchange information on environmental issues. The WECC Water Task Force includes representatives of the aluminum, chemical, petroleum, iron and steel, automotive, forest products, food processing, mining, construction, textiles and electric power industries.

Many member companies' interests in this country's water resources predate the 1972 Federal Water Pollution Control Act. The individual member companies of WECC have been actively involved with the implementation of the Clean Water Act. Further, beginning in the 97th Session of Congress and continuing through the 98th Congress, the WECC Water Task Force conducted a comprehensive review of the Act, and has worked with the House and Senate Committees in an effort to assure an understanding of the many complexities and inter-relationships of the Act.

In light of the Subcommittee hearings scheduled to begin on Tuesday, March 26, 1985, we are taking this opportunity to share with you our views on a number of issues, several of which are included in the two bills before the Subcommittee (S. 53 and S. 652). The following is not intended to be an all-inclusive list of the concerns of the aforementioned industries, but does reflect those issues of major concern on which there is broad consensus among the diverse membership of WECC.

Reauthorization

WECC members, after careful review, concur that the Act is fundamentally sound. Tremendous strides have been accomplished in improving the Nation's water. The waters of this country are getting cleaner.

In order to assure continued progress, the Congress should reauthorize the Clean Water Act for a five year period. However, the Act could be made more effective by (1) eliminating those costly and unnecessary regulatory requirements which result in little or no improvement in water quality, and (2) wherever possible, returning the decision-making process to the state and/or local level.

BAT/BCT Industrial Compliance Deadline Extension

Section 301 requires compliance by July 1, 1984 with BAT effluent limitations for toxic pollutants and with BCT effluent limitations for conventional pollutants. EPA has not been able to promulgate BAT/BCT effluent limitations guidelines for most industries in sufficient time for industries to be able to comply with the guidelines by 1984.

WECC members note that both the Senate and House bills considered in the 98th Congress, as well as those introduced in the 99th Congress, would extend the compliance deadline. We strongly support an extension of at least three years, if necessary, after guideline promulgation for industry to install the required technology and come into compliance with new requirements. At a minimum this would extend the date until July 1, 1988.

Extension of Section 301(k) Deadline for Innovative Technology

Section 301(k) provides an extension of the compliance deadline to July 1, 1987 for direct dischargers who employ innovative technology. This provision is essential to encourage industry to develop innovative approaches to pollution control. The usefulness of this provision has been limited, however, because (1) it is not applicable to indirect dischargers, and (2) it is not clear that it is applicable to BCT effluent limitations.

WECC therefore urges that Section 301(k) be amended to make clear it is applicable to indirect dischargers and to BCT limitations as well. Further, the July 1, 1987 deadline should be updated to mandate compliance within three years after BAT/BCT compliance is otherwise required.

Length of Permit Life

EPA continues to face a backlog of thousands of permit applications. The need for renewal of permits every five years, or even more frequently in many instances, subjects EPA and the state agencies to substantial administrative burdens.

WECC agrees with pending House and Senate provisions to extend the maximum life of an NPDES permit from five to ten years. The ten year permit time should be applied broadly, including those permits which incorporate variances issued under the Act. However, we do not believe the broad mandatory reopener provisions included in S. 53 are necessary or productive. WECC members concur with the reasonableness of including a mandatory reopener clause for Section 307(a) toxic effluent standards. Reopening of a permit for other requirements of the Act should be discretionary.

WECC strongly urge the Subcommittee, during its deliberations, to revisit this issue.

Antibacksliding

Section 110 of S. 53 includes a provision eliminating the circumstances under which Best Professional Judgment (BPJ) permits can be renewed, reissued or modified as NPDES permits to contain less stringent effluent limitations.

This provision is a modification of the language originally included in S. 431 as reported by the Committee in the 98th Congress. WECC strongly opposed the original language, as it eliminated virtually any grounds for change in permit limits upon renewal or reissuance. WECC continues to question the need for inclusion of a permit freeze provision in a legislative package. However, this provision, while designed to restrict "backsliding," does recognize the legitimate necessity for changes in permits under limited circumstances. We encourage the Committee to make it clear in legislative history that this is an explicit statement of Congressional intent.

State Administration of the NPDES Program

States may administer the NPDES program within their borders if EPA approves their program. In practice, EPA has retained much control over state programs that have been approved. State agencies responsible for administering the NPDES program should be given authority to exercise their own discretion in setting permit requirements consistent with federal law.

WECC supports Section 109 of S. 53 which would enable states to receive partial NPDES permit program delegation. In addition, WECC urges the Subcommittee to consider legislation to assure that EPA's efforts and available manpower are focused on periodic auditing of the states' performance, rather than on individual review of each state permit.

Post-Best Available Technology (BAT) Provisions

WECC supports the goal of controlling toxicity in surface waters by flexible, resource-effective programs. Therefore, we urge you to oppose any revisions of the "post-BAT" provisions of the existing Clean Water Act, which already provide sufficent authority for EPA's water protection program. EPA's present program must be implemented on a site-specific basis which enables the regulator to concentrate on priority water bodies and the discharger to select the most appropriate control approach. This is reasonably flexible and effective.

Post-BAT proposals are *premature*, since best available technology (BAT) has not been generally implemented and has not yet been defined for a number of industries. EPA has had no opportunity to examine and evaluate BAT to determine its effect on water quality. Therefore, instead of legislating additional controls now, Congress should direct EPA to undertake a study of the quality of the nation's waters that would permit Congress to assess *whether* additional controls on nonpoint sources or point source dischargers will be needed.

****

Mr. Chairman, WECC members reaffirm our support for the 1972 Federal Water Pollution Control Act and the water pollution control programs that have resulted since its passage. We welcome the opportunity to work with the Environmental Pollution Subcommittee in order to develop responsible amendments to the Act.

Sincerely,

Ed Yawn

Gordon Wood
Olin Corporation
Co-Chairman
WECC Clean Water Act Task Force

Edward R. Yawn
Edison Electric Institute
Co-Chairman
WECC Clean Water Act Task Force

GW/ERY:pkh:lr